NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

TITLE 124 – RULES AND REGULATIONS

FOR THE DESIGN, OPERATION AND MAINTENANCE OF

ON-SITE WASTEWATER TREATMENT SYSTEMS

REVISED EFFECTIVE DATE

DAVE HEINEMAN

GOVERNOR

NEBRASKA ADMINISTRATIVE CODE

NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY
TITLE 124 – RULES AND REGULATIONS FOR THE DESIGN, OPERATION AND MAINTENANCE OF ON-SITE WASTEWATER TREATMENT SYSTEMS

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TITLE 124 – NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 1 – DEFINITIONS

001 "Apron" means a pad at least two feet square in area upon which the discharge pipe of a wastewater lagoon rests.

002 "Baffle" means a partition installed in a septic tank for proper operation of the tank and to provide maximum retention of solids, and includes sanitary tees.

003 "Bedrock" means solid rock exposed at the surface of the earth or overlain by unconsolidated material.

004 "Bedroom" means any room within a dwelling that might reasonably be used as a sleeping room.

005 "Bentonite" means a high swelling clay derived from a chemically altered volcanic ash.

006 "Blackwater" means wastes carried off by toilets, urinals, and kitchen drains.

007 "Building drain" means that portion of the lowest horizontal piping of a drainage system which receives the wastewater discharge from within the walls of the building and conveys it to the building sewer beginning 30 inches outside the building footings.

008 "Building sewer" means that part of the drainage system extending from the end of the building drain to a treatment system or other approved point of disposal.

009 “Certified Professional” means a private onsite wastewater treatment system professional certified under the Private Onsite Wastewater Treatment System Contractors Certification and System Registration Act to perform the tasks for which the certification has been issued.

010 "Class 1 Foundations" means full basements, or non-basement footing foundations, and slab on grade for living quarters that are lower in elevation from the on-site wastewater treatment system.

011 "Class 2 Foundations" means non-basement footing foundations, trailer houses and slab on grade living quarters that are higher in elevation than the on-site wastewater treatment system.

012 "Class 3 Foundations" means structures using slab on grade construction not used as living quarters.

013 "Community water supply system" means a public water supply system that (a) serves at least fifteen service connections used by year-round residents of the area served by the system or (b) regularly serves at least twenty-five year-round residents.

014 "Construction" means the installation of a new septic tank system or the replacement, reconstruction, alteration, modification, or expansion of an existing system.

015 "Department" means the Nebraska Department of Environmental Quality.

016 "Depth marker" means a device used to measure the liquid level present in a septic tank, wastewater lagoon, or other on-site wastewater treatment system.

017 "Development Area" means an area of land in the State of Nebraska subdivided into lots where on-site wastewater treatment systems will be used. Such subdivision shall include the dividing of an area of land into smaller areas to be sold, transferred, leased, rented, or allowed to be used for the purpose of constructing or locating a dwelling, establishment, or other development feature that generates wastewater.

018 “Direct supervision” means that the person overseeing the work of others is physically present on the site where the work is being done and has control over, responsibility for, and professional knowledge of the work being done.

019 “Director” means the Director of the Department of Environmental Quality.

020 "Distribution box" means a watertight box that receives the discharge or effluent from a septic tank and equalizes the flow to each individual line of a soil absorption system.

021 "Distribution system" means piping or other devices which distribute wastewater within a soil absorption system.

022 "Domestic septage" means the liquid or solid material removed from a septic tank, holding tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic wastewater. Domestic septage does not include liquid or solid material removed from a septic tank, holding tank, cesspool, portable toilet, or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from a grease trap at a restaurant.

023 "Domestic wastewater" means human body waste and household type wastes including bath and toilet wastes, laundry wastes, kitchen wastes, and other similar wastes from dwellings and establishments.

024 “Dosing” means the intermittent discharge of effluent from a wastewater treatment device to the soil absorption system and is characterized by brief periods of high flow followed by long periods of no flow.

025 "Dosing chamber" means a receptacle for retaining wastewater until pumped or siphoned to the soil absorption system.

026 "Dosing device" means a pump, siphon, or other device that discharges septic tank effluent from the dosing chamber to the absorption area.

027 "Dwelling" means a building, structure, or place used or intended to be used for human occupancy as a single family or multi-family residence and which generates a wastewater flow equivalent to less than 10 bedrooms or 1000 gallons per day.

028 "Effluent" means wastewater flowing out of an on-site wastewater treatment system.

029 "Encroachment" means the intrusion on the required setback distances.

030 “Endorsement” means a condition that may be added to a certificate that authorizes the certificate holder to perform special procedures that require advanced levels of skills or training.

031 "Establishment" means a building, structure, house or place which generates wastewater flows greater than 1000 gallons/day, or generates non-domestic wastewater, or serves as a restaurant or food preparation facility.

032 ”Failing” means an unauthorized discharge of effluent or wastewater: on the surface of the ground; or to a cesspool, seepage pit, dry well, or leaching pit; or to an absorption system with less than 4 feet to groundwater or other limiting soil characteristics; or which threatens to cause pollution of any air, water, or land of the State; or which threatens public health.

033 "Fill" means soil, rock, gravel, or waste material which has been placed over the original soil or bedrock and is characterized by a lack of distinct horizons or color patterns as found in naturally developed, undisturbed soils.

034 "Filter material" means washed-gravel, crushed stone, slag, clean gravel, or tire chips ranging in size from 1/4 to 2 1/2 inches. The filter media shall be free of clay, silt and rubber crumbs. Tire chips shall be 95 % free of metal. Crushed stone shall be durable and non-calcareous.

035 "Flood elevation - ten year" means that flood elevation which has a probability of being equaled or exceeded once in ten years.

036 "Freeboard" means the vertical distance between the design full liquid level and the level at which liquid will overflow from a lagoon.

037 "Gravelless system" means a chamber or pipe absorption system designed to be installed without filter material.

038 "Graywater" means all domestic waste excluding blackwater and including bath, lavatory, laundry, and sink waste except kitchen sink waste.

039 "Grease trap" means a watertight tank for the collection and retention of grease which is accessible for periodic removal of the contents.

040 "Groundwater" means water occurring beneath the surface of the ground that fills available openings in rock or soil materials such that they may be considered saturated.

041 "Holding tank" means a tank for the storage of wastewater until it can be transported to a point for proper disposal.

042 "Industrial waste" means wastewater not otherwise defined as domestic wastewater, including the runoff and leachate from areas that received pollutants associated with industrial or commercial storage, handling, or processing.

043 "Influent" means wastewater flowing into an on-site wastewater treatment system.

044 "Inspecting" means the practice of examining the components of an onsite wastewater system, the operational condition of the system, or the site conditions for the purpose of providing verification of compliance with this Title.

045 "Inspector" means a certified professional holding a temporary provisional certificate, a certificate by examination, or a hardship certificate issued by the Department in the category of Inspector.

046 “Installer” means a certified professional holding a temporary provisional certificate or a hardship certificate issued by the Department in the category of Installer.

047 “Journeyman Installer” means a certified professional holding a certificate by examination or a hardship certificate issued by the Department in the category of Journeyman Installer.

048 “Journeyman Pumper” means a certified professional holding a certificate by examination or a hardship certificate issued by the Department in the category of Journeyman Pumper.

049 “Layout” means the practice of determining wastewater design flows and loadings, selecting system type, sizing and selecting system components, and locating system components for the purpose of construction, reconstruction, alteration or modification of an onsite wastewater system.

050 “Liner" shall mean the material or substance used to line the bottom of a wastewater lagoon, sand filter, wetlands cell, or other onsite wastewater treatment system so that percolation of liquids through the soil is controlled.

051 “Master Installer” means a certified professional holding a certificate by examination or a hardship certificate issued by the Department in the category of Master Installer.

052 “Master Pumper” means a certified professional holding a certificate by examination or a hardship certificate issued by the Department in the category of Master Pumper.

053 “Mound system” means an onsite wastewater treatment designed and installed such that the infiltrative surface is above the original ground elevation, includes at least 12 inches of clean sand between the bottom of the infiltrative surface and the original ground elevation, is pressure dosed to provide uniform distribution of effluent over the entire infiltrative surface, and is capped with suitable soil material to stabilize the surface and encourage vegetative growth.

054 "Non-community water supply system" means any public water supply system that is not a community water system.

055 "NPDES" means a permit issued in accordance with Title 119 - Rules and Regulations Pertaining to the Issuance of Permits Under the National Pollutant Discharge Elimination System.

056 "Observation hole" means an excavation, test pit, or auger boring, used to determine the soil profile and conditions, or monitor the groundwater levels.

057 "On-site wastewater treatment system" means any system of piping, treatment devices, or other appurtenances that convey, store, treat, or dispose of domestic or non-domestic wastewater, but not including wastewater from a livestock waste control facility, on the property where it originates, or on nearby property under the control of the user, which system is not connected to a public sewer system. An on-site wastewater treatment system begins at the end of the building drain. All systems except septic systems are limited to a maximum size of 1000 gallons per day to be considered an on-site wastewater treatment system. The word “onsite” used in this Title is equivalent to the word “on-site”.

058 "Percolation rate" means the rate obtained from percolation tests used in determining the amount of absorption area required, usually expressed in minutes per inch.

059 "Percolation test" means the determination of the suitability of an area for subsurface wastewater effluent disposal by testing the rate at which the undisturbed soil in an excavated pit or hole of standard size will absorb liquid per unit of surface area.

060 "Perforated pipe" means one type of distribution tile generally four inches in diameter with half to three-fourths inch diameter perforations designed to distribute wastewater effluent.

061 "Plastic limit" means the water content expressed as a percentage of the dry weight of soil at which the soil mass ceases to be plastic and becomes brittle.

062 "Pollution" means the man-made or man-induced alteration of the chemical, physical, biological, or radiological integrity of water of the State.

063 “Private well” means a well which provides water supply to less than 15 service connections and regularly serves less than 25 individuals.

064 “Professional engineer” means a person who is licensed as a professional engineer by the Nebraska Board of Engineers and Architects.

065 "Public water supply system" means a water supply system for providing the public with water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen service connections or regularly serves an average of at least twenty-five individuals daily at least sixty days per year. This definition shall include:

065.01 Any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, and

065.02 Any collection or pretreatment storage facilities not under such control, which are used primarily in connection with such system.

066 “Pumper” means a certified professional holding a temporary provisional certificate or a hardship certificate issued by the Department in the category of Pumper.

067 “Pumping” means the practice of maintaining septic tanks, grease traps, holding tanks, and any other components of onsite wastewater systems through the removal, transportation, and disposal of liquid and solid contents of the components.

068 “Registered environmental health specialist” means a person who has the educational requirements and has had experience in the field of environmental sanitation required by Nebraska Revised Statutes §71-3703 and is registered with the Nebraska Board of Registration for Environmental Health Specialists in accordance with Nebraska Revised Statutes §71-3702 through §71-3715.

069 “Repair” means the correction of a mechanical, electrical, or minor structural defect in an existing onsite wastewater system component such as, but not limited to, sealing a crack in a tank lid, replacing a tank baffle, leveling a distribution box, replacing a building sewer pipe, or replacing a cracked pipe between the septic tank and soil absorption system. Repair does not include replacement of tanks or soil absorption systems, extension or enlargement of soil absorption components and systems, replacement of distribution pipes, or covering or plugging holes in metal tanks.

070 "Restaurant" means a public eating place.

071 "Sand" means a soil texture composed by weight of at least 90 percent of soil particles ranging in size between .05 and 2.0 mm or .002 inches and .08 inches.

072 "Sandy soil" means the soil having the following textures: sands, fine sands, loamy fine sands, and loamy very fine sands.

073 "Septic tank" means a watertight covered receptacle designed and constructed to receive wastewater from a building sewer, separate solids from liquids, digest organic matter, store

digested solids through a period of detention, and allow the clarified liquid to discharge to a soil absorption system.

074 “Septic system” means an onsite wastewater treatment system that has a septic tank and a soil absorption system.

075 "Sewage" means any water carrying domestic waste exclusive of footing and roof drainage, from any industrial, agricultural, or commercial establishment or any dwelling or any other structures. Domestic waste includes but is not limited to liquid waste produced by bathing, laundry, cooking operations, and liquid waste from toilets and floor drains and specifically excludes animal waste and commercial process water.

076 "Site" means the area bounded by the dimensions required for the proper location of the soil absorption system.

077 “Siting” means the practice of the investigation, examination, and reporting of design-controlling physical characteristics of an area at which an onsite wastewater system is to be constructed, reconstructed, altered, or modified; including, but not limited to topography, drainage, landscape position, soil evaluation, location and type of wells, water lines, property lines, foundations, and surface water features.

078 “Slope" means the ratio of vertical rise or fall to horizontal distance.

079 "Sludge" means the accumulated settled solids deposited from wastewater and containing water to form a semi-liquid mass.

080 "Soil absorption system" means a drainfield, leaching area, or seepage bed including the effluent application/distribution system intended for the treatment of wastewater or disposal of effluent. The absorption system includes the infiltrative surface in the absorption trench and the soil between and around the trenches.

081 “Soil Evaluation” means the practice of the investigation, examination, testing, and reporting of design-controlling characteristics of the soil and subsurface features at an area at which an on-site wastewater soil absorption system is to be constructed, reconstructed, altered, or modified; including, but not limited to soil type, structure, permeability, absorption capacity, and percolation rate, and the depth to seasonal high groundwater, bedrock, or other subsurface barrier layers.

082 “Soil Evaluator” means a certified professional holding a certificate by examination or a hardship certificate issued by the Department in the category of Soil Evaluator.

083 "Subdivision" means the division of lot, tract, or parcel of land into two or more lots, sites, or other divisions of land for the purpose, whether immediate or future, of ownership or building development, except that the division of land shall not be considered to be a subdivision when the smallest parcel created is more than ten acres in area. For the purposes of this regulation, the term “subdivision” includes the dividing of an area of land into smaller areas to be sold, transferred, leased, rented, or allowed to be used for the purpose of constructing or locating a dwelling, establishment, or other development feature that generates wastewater.

084 "Surface waters" means all waters within the jurisdiction of this state, including all streams, lakes, ponds, impounding reservoirs, marshes, wetlands, watercourses, waterways, springs, canal systems, drainage systems, and all other bodies or accumulations of water, natural or artificial, public or private, situated wholly or partly within or bordering upon the state. Impounded waters in this definition do not include areas designated by the Department as wastewater treatment or wastewater retention facilities or irrigation reuse pits.

085 "Wastewater" means liquid and water borne wastes from a dwelling or establishment . Wastewater includes both blackwater and graywater.

086 "Wastewater lagoon" means a shallow body of water in which organic wastes are decomposed by bacteria in the presence of free oxygen.

087 "Wastewater works" means facilities for collecting, transporting, pumping and treating wastewater and the disposal of treated effluent and sludge.

088 "Waters of the state" means all waters within the jurisdiction of this state, including all streams, lakes, ponds, impounding reservoirs, marshes, wetlands, water courses, waterways, wells, springs, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, situated wholly or partly within or bordering upon the state.

Legal Citation: Title 124, Ch. 1, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

Title 124 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 2 - APPLICATION OF REGULATIONS

001 A dwelling or establishment that generates wastewater shall have an on-site wastewater treatment system in accordance with these regulations or be connected to a wastewater works.

002 Private onsite wastewater treatment systems installed at an electric generation facility site owned by a district organized under Nebraska Revised Statutes, Chapter 70, article 6 are not subject to registration of the on-site systems or required to have installation of the system by a certified Onsite Professional.

003 An on-site wastewater treatment system installed on or after the effective date of these regulations shall meet all requirements of this Title.

004 An existing on-site wastewater treatment system is subject to these design requirements if:

004.01 It is endangering public health, failing, or discharging a prohibited or unauthorized discharge. A cesspool, seepage pit, dry well, or leaching pit is a failing system. A soil absorption system with less than four feet to groundwater or other limiting soil characteristic is a failing system;

004.02 It is being replaced, reconstructed, altered, or modified;

004.03 There is an adverse change in use such as an increase in the number of bedrooms, design flow, or waste strength;

004.04 It begins receiving wastewater from a different dwelling or establishment than it was originally constructed to serve;

004.05 It begins receiving wastewater from a dwelling or establishment that is reconstructed or replaced following an event such as fire that renders the structure unsuitable for occupancy; or

004.06 The system owner creates or causes an encroachment on a setback distance by a change in a property line or construction of a new development feature such as a well, water line or foundation.

005 Repairs and maintenance can be performed on an on-site wastewater treatment system that is functioning properly without being subject to the design requirements of this regulation if:

005.01 The repair is to fix a structural component of the system, or

005.02 The repair is to mechanical devices, pumps, blowers and electrical equipment.

006 A temporary modification to a failing on-site wastewater treatment system not meeting the requirements of this regulation may be performed without meeting these regulations if the modification is to prevent a surface discharge or reduce a threat to public health. The temporary modification may operate for no more than four months without Department approval.

007 A discharge of wastewater is prohibited:

007.01 To surface water without a National Pollutant Discharge Elimination System (NPDES) permit;

007.02 To groundwater without Department approval; and

007.03 To the land surface from a dwelling, establishment, building sewer, or on-site wastewater treatment system without Department approval.

008 In implementing these regulations, the Department shall protect the quality of surface water and groundwater in the immediate vicinity of any proposed on-site wastewater treatment system. The Department shall consider the following:

008.01 The use classification of the surface water and groundwater (Title 117 - Nebraska Surface Water Quality Standards and Title 118 - Ground Water Quality Standards and Use Classification);

008.02 Vulnerability of surface water and groundwater to pollution;

008.03 The beneficial uses existing or assigned to the surface waters and groundwaters. Beneficial uses are those uses of surface waters and groundwaters as determined through Title 117 and Title 118, respectively;

008.04 Characteristics of the on-site wastewater treatment system;

008.05 Technical and socioeconomic factors; and

008.06 Other appropriate site-specific factors.

009 In addition to the requirements of these regulations, all subsurface disposal systems having the capability to accept sanitary waste generated by greater than 20 persons or the fluid flow of greater than 1000 gallons per day, or on-site wastewater treatment systems receiving non-domestic wastes may be subject to Title 122 - Rules and Regulations for Underground Injection and Mineral Production Wells. The discharge of motor vehicle wastes to a septic system is prohibited.

010 Nothing in this Title shall prevent more stringent local requirements from being adopted.

011 Where applicable, Nebraska Health & Human Services System Title 178 NAC 12 - Regulations Governing Water Well Construction, Pump Installation, and Water Well Decommissioning Standards and Title 179 NAC 2 - Regulations Governing Public Water Supply Systems may require more stringent setback requirements.

Enabling Legislation: Neb. Rev. Stat. §81-1505(8)

Legal Citation: Title 124, Ch. 2, Nebraska Department of Environmental Quality.

NEBRASKA ADMINISTRATIVE CODE

Title 124 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 3 - PERMITS AND AUTHORIZATION BY RULE

001 There shall be two procedures designed to cover all onsite wastewater treatment systems under these regulations as follows:

001.01 Authorization by Rule as described in 002 below.

001.02 Construction and Operating Permits as described in 003 below.

002 Authorization by Rule:

002.01 The owner of a dwelling or, an establishment with flow from toilets, urinals, and lavatories of less than 1,000 gallon per day, is hereby authorized by rule, through the services of a professional engineer, registered environmental health specialist, or certified professional, to construct, reconstruct, alter, or modify an on-site wastewater treatment system provided such system does not endanger human health or cause pollution and meets all the provisions for design, setback distances and reserve area prescribed in these regulations. Construction of a mound system is not covered by Authorization by Rule.

002.02 The owner of a dwelling or, an establishment with flow from toilets, urinals, and lavatories of less than 1,000 gallon per day, is hereby authorized by rule to operate an on-site wastewater treatment system provided such system is not failing, does not endanger human health, does not cause pollution, and if installed on or after January 1, 2004, has been registered with the Department in accordance with this Title. Operation of a mound system is not covered by Authorization by Rule.

002.03 A copy of the following information must be maintained on the premises of the facility using the on-site wastewater treatment system and made available to the Department by the owner or installer upon request:

002.03A Copy of the system registration form submitted to the Department in accordance with this Title.

002.03B An appropriately scaled drawing of the on-site wastewater treatment system, which specifies location, setbacks, capacity, materials of construction, and the construction details of the system. The drawing shall be on no less than

8.5 by 11 inch paper and shall be neatly drawn with appropriate dimensions indicated.

002.03C Soil percolation test results performed in accordance with Chapter 6.

003 The owner of a dwelling or establishment proposing to construct an onsite wastewater treatment system for domestic wastewater flows of 1,000 gallons per day or more, or with other than household type wastes, or proposing to construct an onsite wastewater treatment system not covered by "Authorization by Rule" as provided for in section 002 above shall apply for and obtain a construction/operating permit from the Department. When an application for a construction/operating permit is required, the owner must obtain a construction permit from the Department prior to construction and an operating permit from the Department prior to operation. The construction permit and the operating permit for a single system are covered by one application.

003.01 The permit application shall include the completed permit application form (Form B in Appendix K), the permit application fee (Appendix A), plans, specifications, soil percolation information, soil evaluation, and soil boring or observation information. Three sets of all plans, specifications, reports, and technical documents shall be included.

003.02 The plans, specifications, reports, and other technical documents submitted as part of the application shall be prepared and properly stamped and signed by a Professional Engineer licensed in the State of Nebraska.

003.03 See Chapter 4 for minimum site evaluation information requirements. Other information may be required by the Department to ensure proper engineering design and operation.

004 Construction Permit:

004.01 A construction permit shall be issued in the name of the facility, facility's owner, or its cognizant official, along with its legal location.

004.02 A construction permit is valid for one year from date of issuance. Prior to expiration, the owner may submit a written request for reauthorization or extension from the Department. Such reauthorization or extension may be subject to any additional requirements of regulations in effect at the time the reauthorization or extension is issued, and such reauthorization or extension will be valid for no more than one year from date

of reissuance. Additional reauthorization or extension may be requested in writing prior to expiration.

004.03 The onsite wastewater treatment system shall be constructed according to the Department approved design.

004.04 The owner shall notify the Department of significant modifications to the approved design and obtain Department approval prior to changes being made in the system, including but not limited to additions, changes in wastewater characteristics (quality or quantity), and system design.

004.05 The Department may require, as a construction permit condition, submittal of an operation and maintenance manual or plan to provide for the proper operation of the on-site wastewater treatment system.

004.06 The Department may require, as a construction permit condition, submittal of a groundwater-monitoring plan for an on-site wastewater treatment system if there is a potential for groundwater pollution.

005 Operating Permit:

005.01 An operating permit shall be issued when:

005.01A The Department is notified, on Form J (Appendix G) signed by the professional engineer who designed the system, that construction of the system is complete, in compliance with the approved design, and has satisfied all construction permit conditions; and

005.01B The system registration form, system registration fee, and any applicable late fee have been received by the Department.

005.02 The Department may require, as an operating permit condition, groundwater monitoring for any on-site wastewater treatment system if there is a potential for groundwater pollution.

005.03 The Department may require, as an operating permit condition, implementation of a Department approved operation and maintenance plan to ensure proper operation of the on-site wastewater treatment system.

005.04 The permittee shall operate and maintain the on-site wastewater treatment system in compliance with any permit conditions, these regulations and the Nebraska Environmental Protection Act §§81-1501 et seq.

006 Any permit or authorization by rule may be denied, suspended, or revoked, after notice and opportunity for public hearing according to Title 115 – Rules of Practice and Procedure, for cause, including, but not limited to:

006.01 Violation of any term or condition of a permit or authorization by rule.

006.02 Obtaining a permit by misrepresentation of any relevant facts or failure to disclose fully all relevant facts.

006.03 Information indicating that the on-site wastewater treatment system is likely, in the Department's judgment, to adversely affect human health or that a potential for ground or surface water pollution exists.

006.04 The existence of factors arising after permit issuance or authorization by rule which would have required limitations or a denial of permit application or authorization by rule.

006.05 Adverse changes in use, such as flow greater than design, or type of wastewater.

006.06 Adverse changes in site conditions created or caused by the system owner such as an encroachment on setback distances, placement of fill or an impermeable surface over the soil absorption system, vehicular traffic or other soil compacting activities over the soil absorption system, or reduction in the size of a lot where a lagoon is installed to an area less than three acres.

006.07 The performance of any siting, layout, construction, reconstruction, alteration, modification, repair, or pumping of the on-site wastewater system, on or after January 1, 2004, by any person who is not a professional engineer, a registered environmental health specialist, or certified professional holding a valid certificate in accordance with this Title in the category of work performed.

006.08 Failure to have registered with the Department an on-site wastewater system that was constructed, reconstructed, altered, or modified on or after January 1, 2004.

007 Transferability of Permits and Authorization by Rule.

007.01 Any transfer of ownership of a permitted or authorization by rule system shall automatically authorize the new owner to operate under the existing permit or authorization by rule.

007.02 Subsequent permit or authorization by rule holders are under the same obligations and conditions of the permit as the original or previous permittee or authorization by rule holder.

008 Operating an on-site wastewater system is prohibited if:

008.01 The system was constructed under a construction permit and there is no operating permit or the operating permit has been denied, suspended, or revoked;

008.02 The system was constructed under authorization by rule and the authorization by rule to operate has been suspended or revoked;

008.03 The system was constructed without a construction permit and did not meet the requirements for authorization by rule to construct without a construction permit; or

008.04 The system is endangering public health or failing, or if operation of the system results in a prohibited discharge.

009 The owner of a septic tank and soil absorption system may also be required to apply for authorization to operate the system or to apply for and obtain a separate permit under Title 122 - Rules and Regulations for Underground Injection and Mineral Production Wells. The Department will make a determination of the need for a permit under Title 122.

Enabling Legislation: Neb. Rev. Stat. §81-1505(8), §81-1506, §81-15,237, §81-15,247, §81-15,248.

Legal Citation: Title 124, Ch. 3, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

Title 124 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 4 - SITE EVALUATION AND SUBDIVISIONS

001 Each proposed site for the location of an on-site wastewater treatment system shall be evaluated by a professional engineer, registered environmental health specialist, Journeyman Installer, or Master Installer, and the following information shall be recorded.

001.01 The type, size, location, and elevation of the proposed system, clearly identified on a scaled drawing of sufficient size which will include: the legal description and survey of the lot and immediate vicinity property lines, buildings, water supply wells, buried water pipes and utility lines, the ordinary high water mark of lakes, rivers, streams, and the location and the type of water supply wells within 1000 feet of the proposed on-site wastewater treatment system.

001.02 Depth to the seasonal highest measured or estimated groundwater table and to the bedrock surface, if this depth is less than the depth of the seasonal high groundwater table.

001.03 Direction of groundwater flow.

001.04 Soil conditions, properties, and permeability.

001.05 When a permit or subdivision approval is to be issued, additional information may be required.

002 A new on-site wastewater treatment system shall not be installed in a designated ten-year flood plain.

003 The seasonal high water elevation of the groundwater table must be at least four feet below the bottom of the infiltrative surface of the soil absorption system in order to provide adequate filtration through the soil and avoid pollution of the groundwater. One or more of the following sources or types of information shall be used to determine the seasonal high water elevation of the groundwater.

003.01 U.S. Department of Agriculture Natural Resources Conservation Service soils maps and soil interpretation records.

003.02 Evaluation of soil color and the presence or absence of mottling.

003.03 Evaluation of impermeable or semi-permeable soil layers.

003.04 Measured water levels for any nearby test hole(s), observation well(s), or water well(s).

004 Prior to construction of a development area where an on-site wastewater treatment system is proposed on any lot less than three acres in size, the owner of the development area shall submit an application for subdivision review and receive Department approval for the use of on-site wastewater treatment systems for the development area. The Department will review the application and determine the acceptability of on-site wastewater treatment systems for the development area. The Department will either approve or deny the use of on-site wastewater treatment systems for the development area. Approval will be based upon an evaluation of the submitted information to meet design requirements of this Title. The application shall include a completed Form SD (Appendix I), the applicable application fee, and three sets of all plans, specifications, reports, and supporting technical documents, all prepared by a professional engineer, registered environmental health specialist, or a master or journeyman installer. Minimum site evaluation information to be submitted as part of the application is identified in 001 above. Other information may be required by the Department as needed to allow adequate review of the proposed development area. The drawings and soils information shall be in accordance with the following requirements:

004.01 For development areas with lot sizes less than 3 acres (12,140 sq. m) but greater than or equal to 1 3/4 acres (8,470 sq. m), the drawings must include the location of all on-site wastewater treatment systems, reserve areas, and well locations for all lots. Also, soil percolation tests, and soil borings or site excavations shall be conducted on a minimum of every fifth lot to determine the soil characteristics and evidence of groundwater.

004.02 For development areas with lot sizes less than 1 3/4 acres (8,470 sq. m) but greater than or equal to 1 1/4 acre (6050 sq. m), the drawings must include the location of all on-site wastewater treatment systems, reserve areas, and well locations and areas for structures including the dwelling or establishment, driveway, and outbuildings for all lots. Also, soil percolation tests, and soil borings or site excavations shall be conducted on a minimum of every fifth lot to determine the soil characteristics and evidence of groundwater.

004.03 For development areas with lot sizes less than 1 1/4 acre (6050 sq. m), the drawings must include the location of all on-site wastewater treatment systems, reserve areas, and well locations and areas for structures including the dwelling or establishment

location, driveway, sidewalks, and outbuildings for all lots and the number of bedrooms available for dwellings and maximum flows for establishments. Also, soil percolation tests, and soil borings or site excavations shall be conducted on every lot to determine the soil characteristics and evidence of groundwater.

005 The owner of any dwelling or establishment constructed after the effective date of these regulations shall establish a reserve area to be used for a replacement on-site wastewater treatment system, which will meet the requirements of these regulations. The reserve area will be considered a part of the on-site wastewater treatment system and all setback requirements apply.

006 For the purpose of this chapter, "lot size" means the area of a lot excluding all area below the normal high water level of any surface water feature, all area below a ten-year flood elevation, and all area within the right-of-way or easement of a street, road, or access easement.

Enabling Legislation: Neb. Rev. Stat. §81-1505(8), §81-15,237, §81-15,247, §81-15,248.

Legal Citation: Title 124, Ch. 4, Nebraska Department of Environmental Quality.

NEBRASKA ADMINISTRATIVE CODE

Title 124 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 5 - SETBACK DISTANCES

001 The installation of a septic tank system or holding tank is prohibited within the setback distances in Table 5.1 unless individually reviewed and a construction permit is issued by the Department or the installation is in an area controlled by a local government agency that has a Memorandum of Agreement (MOA) with the Department with specific encroachment allowances listed in the MOA as determined by scientific data and inspected by the local agency.

TABLE 5.1 - Septic Tank, Holding Tank, and Soil Absorption Systems

	Minimum Setback Distance feet (meters)	
Item	Tanks	Absorption, Infiltrative, and Evaporative Systems
Surface Water:	50 ft. (15.2 m)	50 ft. (15.2 m)
Private Drinking Water Wells:	50 ft. (15.2 m)	100 ft. (30.5 m)
Public Drinking Water Supply Wells:		
Non-Community System	50 ft. (15.2 m)	100 ft. (30.5 m)
Community System	500 ft. (152.4 m)	500 ft. (152.4 m)
Community System when a septic system or soil absorption system of > 1000 gpd is proposed	500 ft. (152.4 m)	Evaluated by professional engineer for potential impact on the well and submitted to the Department for approval if less than 1000 ft.
All Other Water Wells:	50 ft. (15.2 m)	100 ft. (30.5 m)
Water Lines:		
Pressure-Main	10 ft. (3.1 m)	25 ft. (7.6 m)
Pressure-Service Connection	10 ft. (3.1 m)	25 ft. (7.6 m)
Suction Lines	50 ft. (15.2 m)	100 ft. (30.5 m)
Property Lines:	5 ft. (1.5 m)	5 ft. (1.5 m)
Foundations: (see "class" definition following Table 5.2)		
Except Neighbors Foundation:		
Class 1 *	15 ft. (4.6 m)	30 ft. (9.1 m)
Class 2 **	10 ft. (3.1 m)	20 ft. (6.1 m)
Class 3 ***	7 ft. (2.1 m)	10 ft. (3.1 m)
Neighbors Foundation:		
Class 1 *	25 ft. (7.6 m)	40 ft. (12.2 m)
Class 2 **	20 ft. (6.1 m)	30 ft. (9.1 m)
Class 3 ***	15 ft. (4.6 m)	20 ft. (6.1 m)

002 The installation of a lagoon is prohibited within the setback distances in Table 5.2 unless individually reviewed and a construction permit is issued by the Department, or the installation is in an area controlled by a local government agency that has a Memorandum of Agreement (MOA) with the Department with specific encroachment allowances listed in the MOA as determined by scientific data and inspected by the local agency.

TABLE 5.2 - Lagoons

Item	Minimum Setback Distance - feet (meters)
Surface Water: Distance from High Water Mark	50 ft. (15.2 m)
Private Drinking Water Wells:	100 ft. (30.5 m)
Public Drinking Water Supply Wells:	
Non-Community	100 ft. (30.5 m)
Community	Evaluated by a professional engineer for potential impact on the well and submitted to the Department for approval if less than 1000 ft (304.8 m).
All Other Water Wells:	100 ft. (152.4 m)
Water Lines:	
Pressure-Main	25 ft. (7.6 m)
Pressure-Service Connection	25 ft. (7.6 m)
Suction Line	100 ft. (30.5 m)
Property Lines:	50 ft. (15.2 m)
Trees:	50 ft. (15.2 m)
Foundations: (see "class" definition at end of Table 5.2)	
Except Neighbors Foundation:	
Class 1 *	100 ft. (30.5 m)
Class 2 **	100 ft. (30.5 m)
Class 3 ***	50 ft. (15.2 m)
Neighbors Foundation:	
Class 1 *	200 ft. (61.0 m)
Class 2 **	200 ft. (61.0 m)
Class 3 ***	100 ft. (30.5 m)

*** Class 1 Foundations:**
Full basements, or non-basement footing foundations and slab on grade for living quarters that are lower in elevation from the on-site wastewater treatment system.

**** Class 2 Foundations:**
Non-basement footing foundations, trailer houses and slab on grade living quarters that are higher in elevation than the on-site wastewater treatment system.

***** Class 3 Foundations:**
Structures using slab on grade construction and are not used as living quarters.

003 Location of an on-site wastewater treatment system on property not owned by the facility using the system shall have an easement between the facility and the land owner on which the system resides for the life of the facility.

004 The Department may require greater setback distances for approvable surface discharge systems as necessary to protect the surface water and groundwater.

005 Setback distances for all other on-site wastewater treatment systems shall be determined by the Department to protect public health and the environment.

006 Construction or relocation of a foundation, well, water line, surface water feature, or property line by the system owner within the setback distances listed in Table 5.1 or Table 5.2. of any onsite wastewater system or area reserved for a replacement soil absorption system is prohibited, except that the Department may approve, at the system owner's request, encroachment of a foundation within the minimum setback distances to system components upon submittal of a foundation construction plan and a letter from a professional engineer stating that he or she has evaluated the proposed construction plan and in his or her professional opinion, the encroachment will not have any detrimental effect on the structural integrity of the foundation or system components, or on the proper function and operation of the system components, or on the ability to maintain or replace any of the system components.

Enabling Legislation: Neb. Rev. Stat. §81-1505(8).

Legal Citation: Title 124, Ch. 5, Nebraska Department of Environmental Quality.

NEBRASKA ADMINISTRATIVE CODE

Title 124 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 6 - SOIL PERCOLATION

001 Soil percolation tests shall be conducted in the area where the soil absorption system will be located. Such tests shall not be made on disturbed ground or frozen ground. Where fissured or creviced formations are encountered below the ground surface, the Department shall be consulted for assistance. Soil percolation tests shall be conducted by a professional engineer, registered environmental health specialist, or a certified professional holding a certificate in the category of Inspector, Soil Evaluator, Master Installer, or Journeyman Installer.

002 Percolation tests shall be performed as follows:

002.01 At least three test holes shall be dug and spaced uniformly over the proposed absorption field site. If the difference between the fastest and the slowest measured percolation rate is greater than 20 minutes per inch, or there are other indications that soil conditions are highly variable, a minimum of four test holes and two test holes per lateral is required.

002.02 These holes shall be dug or bored with horizontal dimensions of from four to twelve inches and vertical sides to the depth of the bottom of the proposed distribution trench. Holes can be bored with a posthole type auger.

002.03 Roughen or scratch the bottom and sides of the holes to provide a natural surface. Remove all loose material from the hole. Place about two inches of 1/4 to 3/4 inch gravel in the hole to prevent bottom scouring.

002.04 Fill the hole with clear water to a minimum depth of twelve inches over the gravel. By refilling, if necessary, or by supplying a surplus reservoir of water (automatic siphon), keep water in the hole for at least four hours, and preferably overnight. In sandy soils containing little or no clay, soaking is not necessary. If after filling the hole twice with 12 inches of water, the water seeps completely away in less than ten minutes, the test can proceed immediately. See 002.05C

002.05 Percolation rate measurements should be made on the day following the saturation process, except in sandy soils.

002.05A If the water remains in the test hole after overnight saturation, adjust the water depth to a minimum of six inches over the gravel. From a fixed reference point, measure the drop in water level during an approximate 30 minute period.

002.05B If no water remains in the hole after overnight saturation, add clear water to a depth of six inches over the gravel. From a fixed referenced point, measure the drop in water level at approximate 30 minute intervals over a four hour period, refilling the hole to a depth of six inches as necessary after each 30 minute period. The drop which occurs during the final 30 minute period is used to calculate the percolation rate.

002.05C In sandy soils, or in other soils in which the first six inches of water seeps away in less than 30 minutes even after the overnight swelling period, the time interval between measurements can be taken as ten minutes, refilling the hole to a depth of 6 inches as necessary after each interval, six test measurements will be made at ten minute intervals. The drop that occurs during the final ten minutes is used to calculate the percolation rate.

002.05D Soils with moderately slow permeability and/or containing greater than 30% clay in the testing zone will require several days saturation when the soil is dry in the summer and other seasons of the year to obtain the required saturation prior to making measurements.

002.06 The percolation test data shall be recorded and maintained on the premises or submitted to the Department as required in Chapter 3.

002.07 Other methods of determining the percolation rate may be approved by the Department if the method is recognized as providing accurate and consistent results.

003 To obtain the percolation rate of a test hole (the average time in minutes for water to fall one inch), divide the number of minutes elapsed by the drop in inches. An average percolation rate for the entire field should then be determined from the percolation rate of each of the test holes. If tests in the area vary more than 20 minutes/inch, variations in soil type are indicated. Under these circumstances, percolation rates should not be averaged and design should be based on the slowest rate, or site relocation should be considered.

004 Site Acceptability Based on Soil Conditions.

004.01 Soil is unsuitable for a soil absorption system if the percolation rate is faster than 5 minutes per inch, or is slower than 60 minutes per inch.

004.01A Soils faster than 5 minutes per inch are acceptable if a twelve-inch thick loamy sand soil liner with a percolation rate of 15 to 20 minutes per inch is installed in the trench in accordance with Chapter 14. A trench is then sized on this soil liner's percolation rate.

004.02 A soil absorption system will not be installed if the percolation rate is outside the range defined above unless designed by a professional engineer and a construction permit is issued in accordance with Chapter 3, Section 003.

004.03 Any alternative on-site wastewater treatment system which is proposed to accommodate unsuitable soil conditions will have to be approved by the Department in accordance with Chapter 3, Section 003.

005 The Department may require verification of percolation rates when submitted results are inconsistent with other known data.

Enabling Legislation: Neb. Rev. Stat. §81-1505(8), §81-15,248.

Legal Citation: Title 124, Ch. 6, Nebraska Department of Environmental Quality.

NEBRASKA ADMINISTRATIVE CODE

Title 124 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 7 - SEPTIC TANK; CONSTRUCTION: MATERIALS USED

001 A septic tank shall be constructed of materials not subject to excessive corrosion or decay and shall be water tight. Concrete, concrete blocks, fiber reinforced plastic (FRP), high density plastic, and fiberglass are acceptable.

001.01 When precast and cast in place reinforced concrete tanks are used they shall be properly cured and of watertight construction.

001.02 All concrete interior surfaces exposed to air shall be coated with a bitumastic or similar compound beginning at an elevation 3 inches below the normal operating level to minimize corrosion.

001.03 Concrete block tanks shall be laid on a solid foundation and mortar joints shall be filled. The interior of the tank shall be surfaced with two one-fourth inch thick coats of portland cement, sand plaster, or shall be coated with a bitumastic material. Special attention shall be given to job-built tanks to insure water tightness.

001.04 The tank shall be designed to withstand soil pressures when empty and not collapse or undergo excessive deflection which would prevent the proper operation of the system, crack or distort components of the system such as the baffles, prevent proper sealing of lids over manholes and inspection ports, or reduce the volume of the system.

001.05 All septic tanks shall be permanently marked to specify the capacity in gallons, manufacturer, and the manufacturer's address. The gallon and manufacturing identification label shall be located next to the manhole towards the inlet side.

Enabling Legislation: Rev. Neb. Stat. §81-1505(8).

Legal Citation: Title 124, Ch. 7, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

Title 124 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 8 - SEPTIC TANK DESIGN

All septic tanks regardless of material or method of construction shall conform to the following criteria as shown in Figures 8.1, 8.2, 8.3, and 8.4.

001 The depth from the invert of the outlet to the floor of the tank (liquid depth) of any septic tank or compartment thereof shall not be less than 42 inches and a liquid depth greater than 78 inches shall not be considered in determining tank capacity. The diameter of a septic tank shall not be less than 60 inches and the length shall be approximately two to three times the width.

002 No tank or compartment thereof shall have an inside horizontal dimension less than 24 inches.

003 Inlet and outlet connections of the tank shall be provided with baffles. See Figure 8.5.

004 The space in the tank between the liquid surface and the top of the inlet and outlet baffles shall be not less than 20 percent of the total required liquid capacity, except that in horizontal cylindrical tanks this space shall be not less than 15 percent of the total required liquid capacity.

005 Inlet and outlet baffles shall be constructed of acid resistant concrete, acid resistant fiberglass, or plastic.

006 Sanitary tees shall be affixed to the inlet or outlet pipes with a permanent waterproof adhesive. Baffles shall be integrally cast with the tank, affixed with a permanent waterproof adhesive, or affixed with stainless steel connectors top and bottom.

007 The inlet baffle shall extend at least 6 inches but not more than 20 percent of the total liquid depth below the liquid surface and at least one inch above the crown of the inlet sewer.

008 The outlet baffle and the baffles between compartments shall extend below the liquid surface a distance equal to 40 percent of the liquid depth except that the penetration of the indicated baffles or sanitary tees for horizontal cylindrical tanks shall be 35 percent of the total liquid depth. They also shall extend above the liquid surface as required in item 004. In no case shall they extend less than six inches above the liquid surface.

009 There shall be at least 1 inch between the underside of the top of the tank and the highest point of the inlet and outlet devices.

010 The inlet invert shall be not less than 2 inches above the outlet invert.

011 The inlet and outlet shall be located opposite each other along the axis of maximum dimension and shall be constructed of noncorrosive materials. The horizontal distance between the nearest points of the inlet and outlet devices shall be at least 4 feet.

012 Sanitary tees shall be at least 4 inches in diameter. Inlet baffles shall be located no less than 6 inches or no more than 12 inches measured from the end of the inlet pipe to the nearest point on the baffle. Outlet baffles shall be located 6 inches measured from beginning of the outlet pipe to the nearest point on the baffle.

013 Access to the septic tank shall be as follows:

013.01 There shall be one or more access manholes at least 12 inches in diameter and located within six feet of all walls of the tank. The manhole shall extend through the top of the tank to a point within 12 inches but at least six inches below grade. Each manhole shall have a cover. The manhole cover shall be covered with at least six inches of earth. A riser as described in Chapter 9, Section 003 may also be provided.

013.02 There shall be an inspection pipe at least 6 inches diameter or a manhole over both the inlet and outlet devices.

014 Compartmentation of single tanks.

014.01 Septic tanks larger than 3000 gallons and fabricated as a single unit shall be divided into two or more compartments.

014.02 When a septic tank is divided into two compartments, not less than one-half nor more than two-thirds of the total volume shall be in the first compartment.

014.03 When a septic tank is divided into three or more compartments, one-half of the total volume shall be in the first compartment and the other half equally divided in the other compartments.

014.04 Connections between compartments shall be baffled so as to obtain effective retention of scum and sludge. The submergence of the inlet and outlet baffles of each compartment shall be as specified in 007 and 008.

014.05 Adequate venting shall be provided between compartments by baffles or by an opening of at least 50 square inches near the top of the compartment wall.

014.06 Adequate access to each compartment shall be provided by one or more manholes.

015 Multiple Tanks

015.01 Where more than one tank is used to obtain the required liquid volume, the tanks shall be connected in series.

015.02 No more than four tanks in series shall be used to obtain the required liquid volume.

015.03 The first tank shall be no smaller than any subsequent tanks in series.

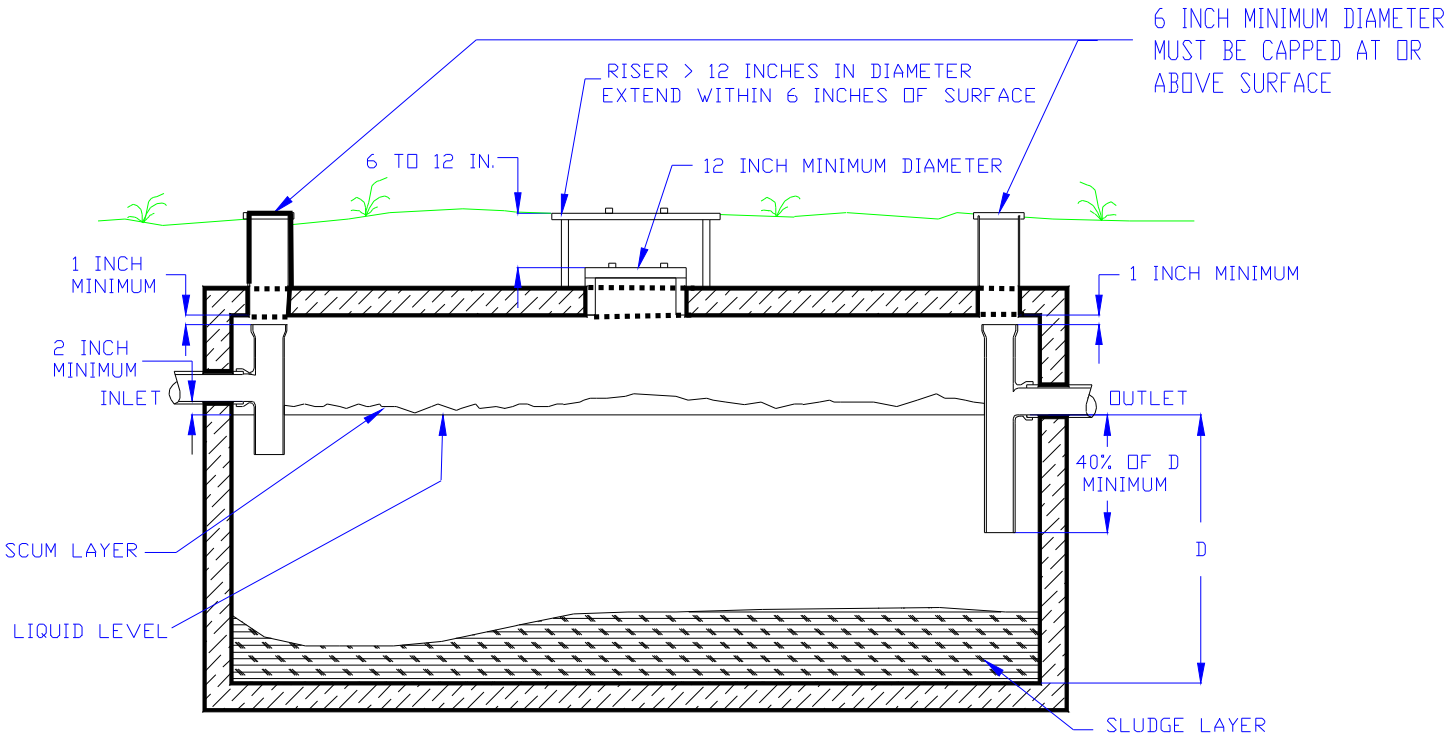


FIG 8.1 Septic Tank, Profile View

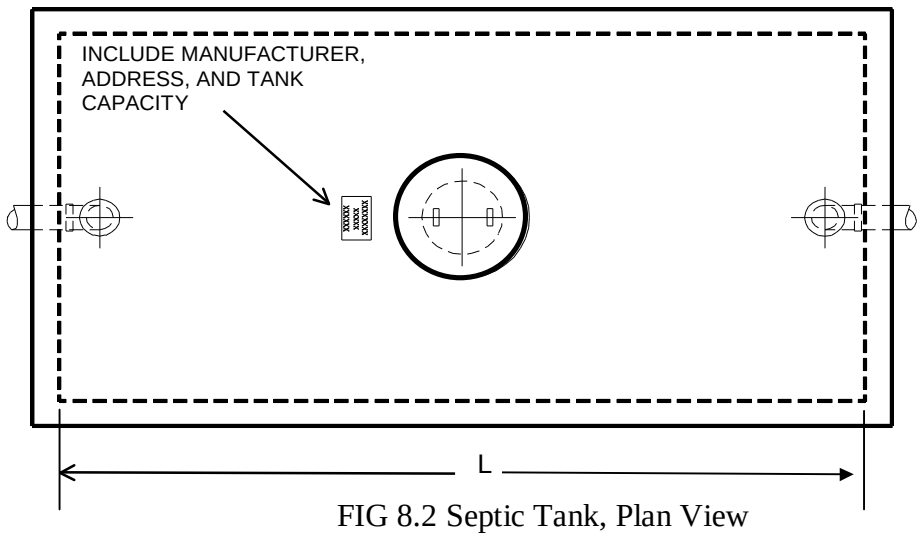


FIG 8.2 Septic Tank, Plan View

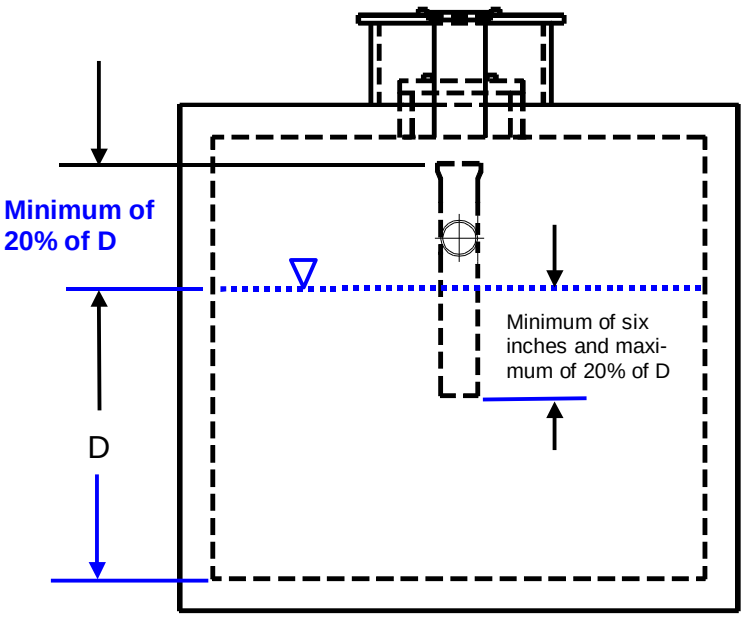
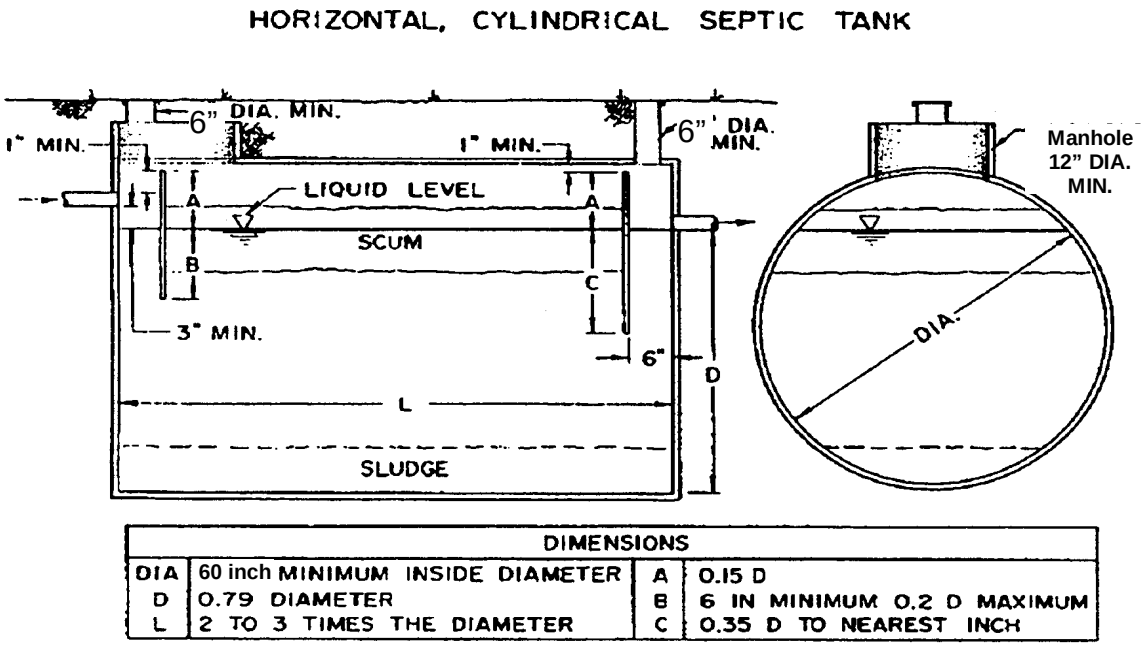
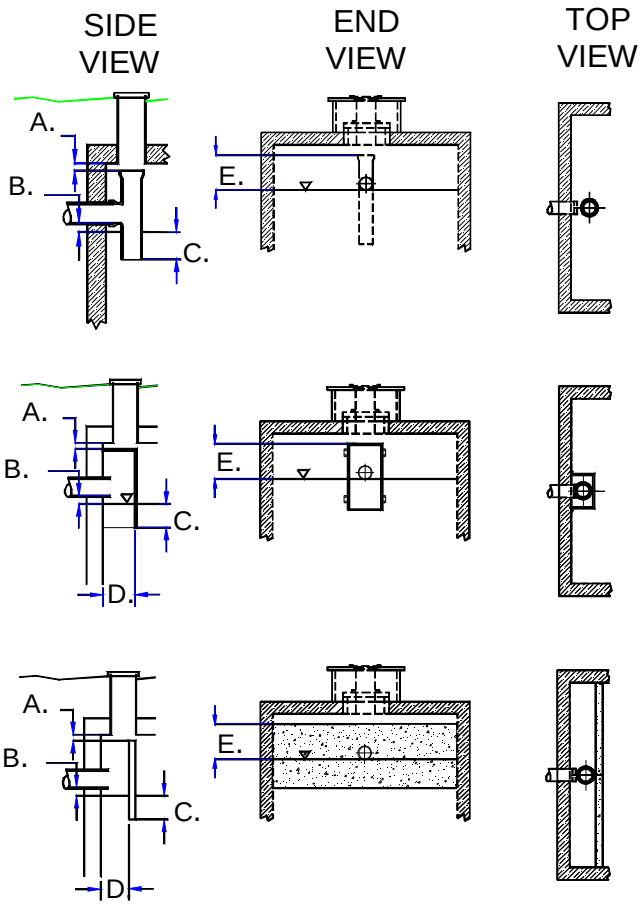


FIG 8.3 Septic Tank Inlet End View



DIMENSIONS			
DIA	60 inch MINIMUM INSIDE DIAMETER	A	0.15 D
D	0.79 DIAMETER	B	6 IN MINIMUM 0.2 D MAXIMUM
L	2 TO 3 TIMES THE DIAMETER	C	0.35 D TO NEAREST INCH

FIG 8.4 - Horizontal Cylindrical Septic Tank



Baffle Notation	Measurement in Inches
A	≥ 1
B	Inlet ≥ 2
C	Inlet ≥ 6 but not more than 20 % of tank depth Outlet ≥ 6 but not more than 40% for square tanks and 35% for round tanks
D	Inlet ≥ 6 but ≤ 12 Outlet = 6
E	≥ 6

FIG 8.5 Baffles

Enabling Legislation: Neb. Rev. Stat. §81-1505(8).

Legal Citation: Title 124, Ch. 8, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

Title 124 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 9 - PLACEMENT OF SEPTIC TANK

001 The septic tank shall be bedded with at least six (6) inches of sand or fine gravel where rock or other undesirable conditions are encountered. The tank shall be placed level. Where excavation is required the hole shall be sufficiently large to permit placement of the tank. Backfilling the excavation for all septic tanks shall be done in layers with sufficient tamping to avoid settling. Backfill material shall be free of large stones and debris.

002 A tank located in a high water table shall be properly secured or ballasted.

003 The manhole shall extend to a point within 12 inches and no closer than 6 inches of finished grade. A riser larger than the manhole extending to the surface, to a point at, or at least within 6 inches of finished grade is also recommended. A cover shall be provided for the riser.

004 The inspection pipe shall extend through the cover and be capped flush or above finished grade.

Enabling Legislation: Neb. Rev. Stat. §81-1505(8).

Legal Citation: Title 124, Ch. 9, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

Title 124 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 10 - SEPTIC TANK CAPACITY

001 "Dwellings" - The liquid capacity of a septic tank serving a dwelling shall be based on the number of bedrooms served. For three or less bedrooms, an adequate septic tank capacity shall be one thousand gallons. For each additional bedroom two hundred fifty gallons shall be added. Table 10.1 may be used to determine capacities.

001.01 For ten or more bedrooms the septic tank shall be sized under the category of "Establishments."

001.02 For multiple dwellings connected to a single tank, one additional bedroom capacity must be added for each dwelling connected. Table 10.2 may be used for sizing.

002 "Establishments" - The liquid capacity of a septic tank serving an establishment other than a dwelling shall be at least equal to 1125 gallons plus 0.75 times the design flow in gallons per day (gpd) for flows over 1500 gpd. For flows less than 1500 gpd, 1.5 times the design flow may be used but a minimum of a 1000 gallon tank is required.

003 For design flows greater than 2000 gpd, the installation of a two-compartment septic tank or two septic tanks installed in series is required.

004 The tank capacity required for septic systems serving high strength, high temperature or inhibitors in wastewater such as camper dump stations, laundry mats, and butcher shops or other similar facilities shall be doubled.

TABLE 10.1 Septic Tank Sizing for a Single Dwelling

Number Of Bedrooms-One Dwelling	Design Flow in Gallons per Day	Septic Tank Size In Gallons	Dwelling With Whirlpool Bath, Septic Tank Size In Gallons
1	200	1000	1000
2	300	1000	1000
3	400	1000	1250
4	500	1250	1500
5	600	1500	1750
6	700	1750	2000
7	800	2000	2250
8	900	2250	2500
9	1000	2500	2750
10	1100	Establishment	Establishment

TABLE 10.2 Equivalent Septic Tank Sizing for Multiple Dwellings

Total Bedrooms	Single Family Dwelling	Two-Units	Three-Units	Four-Units	Five-Units
1	1	-	-	-	-
2	2	3	-	-	-
3	3	4	5	-	-
4	4	5	6	7	-
5	5	6	7	8	9
6	6	7	8	9	Establishment
7	7	8	9	Establishment	Establishment
8	8	Establishment	Establishment	Establishment	Establishment
9	9	Establishment	Establishment	Establishment	Establishment

Add all of the bedrooms for the combined dwelling units and find that number in column 1. After finding the number of bedrooms in column 1 move to the column that has the number of units connected together and select the equivalent size. Use this number in Table 10.1 as the number of bedrooms to size the septic tank.

005 For the purpose of this chapter, "capacity" shall be the volume as measured by the dimensions below the bottom of the outlet.

Enabling Legislation: Neb. Rev. Stat. §81-1505(8).

Legal Citation: Title 124, Ch. 10, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

Title 124 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 11 - HOLDING TANK

001 For dwellings, a holding tank shall have a minimum capacity of 1,000 gallons for two or fewer bedrooms plus 300 gallons for each additional bedroom.

002 For establishments, a holding tank shall have a minimum capacity of at least five times the daily flow but never less than 1,000 gallons.

003 Holding tanks shall be equipped with an alarm or visible float that indicates the tank is 90 percent (90 %) full.

Enabling Legislation: Neb. Rev. Stat. §81-1505(8).

Legal Citation: Title 124, Ch. 11, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

Title 124 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 12 - GREASE TRAP

001 It is required that an external grease trap be installed for all restaurants and establishments involved in food preparation.

001.01 Restaurants and establishments involved in food preparation that are replacing or modifying their on-site wastewater treatment system may install an additional septic tank in the waste line in lieu of a grease trap provided the following conditions are met:

001.01A The restaurant or establishment was constructed before the effective date of these regulations;

001.01B The current kitchen and blackwater waste streams are not separated;

001.01C The additional septic tank is sized following Section 004 below; and

001.01D The additional tank is placed in series with other tanks and complies with Chapter 8, Section 015.

002 Materials and Specifications.

002.01 If an external grease trap is used it shall be watertight, durable, and constructed of the same materials as septic tanks.

002.02 The inlet invert shall be at least 3 inches above the outlet invert.

002.03 The inlet baffle or sanitary tee shall extend at least 24 inches below the liquid level.

002.04 The outlet baffle or sanitary tee shall extend to within 8 inches of the tank bottom.

002.05 The grease trap shall be provided with an inspection or clean out cover over the inlet and outlet.

002.06 Blackwater other than kitchen waste shall not be connected to a grease trap.

002.07 All wastewater from the kitchen operation shall be connected to the external grease trap. The effluent from the grease trap shall connect to the inlet line of the septic tank.

003 Operation and Maintenance

003.01 In order to be effective, grease traps shall be operated properly and cleaned regularly to prevent the escape of appreciable quantities of grease. The frequency of cleaning at any given installation can best be determined by experience based on observation.

004 Sizing of Grease Traps

004.01 A grease trap shall provide twenty four hours of detention time for the average daily flow.

004.02 The minimum capacity of any grease trap shall be 750 gallons.

Enabling Legislation: Neb. Rev. Stat. §81-1505(8).

Legal Citation: Title 124, Ch. 12, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

Title 124 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 13 - SOIL ABSORPTION SYSTEM

001 A soil absorption system is the part of the on-site wastewater treatment systems which utilizes the soil to further treat and dispose of effluent from an on-site wastewater treatment system in a manner that does not result in a point source discharge and does not create a nuisance, health hazard, or ground or surface water pollution.

002 Two types of soil absorption systems are considered acceptable: absorption trenches and seepage beds.

Enabling Legislation: Neb. Rev. Stat. §81-1505(8).

Legal Citation: Title 124**,** Ch.13, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

Title 124 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 14 - DESIGN AND CONSTRUCTION OF SOIL ABSORPTION SYSTEM

001 The bottom of trenches and beds shall be at least four feet above the seasonal high groundwater table. If a water table is not present then the bottom of the trench shall be at least four feet above the bedrock or other barrier layer.

002 A soil absorption system shall not be installed in fill, except when the fill material is sand, or when the bottom 12 inches or more of the trench or bed is located in undisturbed native soil below the fill. When constructing a system in sand fill, sufficient time shall be allowed after placement of the fill, or sufficient compaction effort applied to the fill to prevent settlement after the system is installed.

003 When installing a trench or bed in soil that has a percolation rate faster than 5 minutes per inch, a twelve-inch thick loamy sand soil liner with a percolation rate of 15 to 20 minutes per inch shall be installed in the trench or bed. The liner shall cover the bottom of the trench or bed and extend up the sidewalls a minimum of nine (9) inches for filter material absorption systems, to the top of the slotted sidewalls in gravelless chamber systems, or to the top of the pipe in gravelless pipe systems. The soil absorption area is then sized on this soil liner's percolation rate.

004 Trenches and beds shall not be more than 100 feet in length unless it is installed using an instrument to insure that the trench is level, then trenches can be up to 150 feet in length for gravity systems. Pressure systems are not restricted in length when an instrument is used to insure that the system is level.

005 The bottom of the trench or bed excavation shall be level.

006 The bottom and sides of the soil absorption system to the top of the filter material shall be excavated in such a manner as to leave the soil in a natural, unsmeared, and uncompacted condition. Excavation shall be made only when the soil moisture content is at or less than the plastic limit.

007 When the percolation rate is slower than 10 minutes per inch, excavation equipment or other vehicles shall not be driven on the soil absorption area.

008 The distribution pipes shall be laid level or on a uniform slope away from the distribution device of no more than four inches per 100 feet.

009 Distribution pipes in beds shall be uniformly spaced no more than 5 feet apart and not more than 30 inches from the side walls of the beds.

010 The trenches or beds shall be backfilled and crowned above finished grade to allow for settling. The top six inches of soil shall have the same texture and density as the adjacent soil.

011 The minimum depth of cover over the distribution pipes shall be at least eight inches. The maximum depth of cover over the distribution pipes shall be no more than 36 inches.

012 No parking area, driveway, or impermeable surface or cover shall be installed, created, or located by the owner, or anyone acting for the owner, over or within five (5) feet horizontally of the soil absorption system.

013 Gravity Distribution:

013.01 When a soil absorption system is located in sloping ground from 0 to 3%, septic tank effluent may be distributed to the soil absorption system by either a distribution box, drop box or a header pipe.

013.02 A soil absorption system~~s~~ in sloping ground with greater than 3% slope shall use a drop box or pressure distribution.

013.03 The bottom of each trench shall be level.

013.04 The absorption trenches shall follow the ground surface contours so that variations in trench depth are minimized.

013.05 When ground slope is less than 10%, there shall be a minimum of 4 feet of undisturbed soil between adjacent trenches and between the septic tanks and the nearest trench. When ground slope is 10% to 20%, there shall be a minimum of 6 feet of undisturbed earth between adjacent trenches and between the septic tanks and the nearest trench. When the slope exceeds 20%, there shall be a minimum of 10 feet of undisturbed soil between adjacent trenches and between the septic tanks and the nearest trench.

014 Distribution box: Septic tank effluent may be distributed by a distribution box. The distribution box may be built as an integral part of the septic tank or may be a separate unit set on solid ground and anchored in the drainfield. When a distribution box is used the following criteria shall be observed.

014.01 The distribution box shall be set level and arranged so that effluent is evenly distributed to each distribution line.

014.02 Each distribution line shall connect individually to the distribution box.

014.03 The pipe connecting the distribution box to the distribution line shall be of a tight joint construction laid on undisturbed earth or properly bedded throughout its length.

014.04 Distribution boxes shall be constructed of a durable watertight, non-corrosive material. They shall be designed to accommodate the necessary distribution lines.

014.05 Distribution boxes shall be provided with a minimum 12-inch diameter opening which will serve as a ready access for inspection, cleaning, and general maintenance.

014.06 The inverts of all outlets shall be at the same elevation as measured from a liquid surface in the bottom of the box.

014.07 The inlet invert shall be at least one inch above the outlet inverts.

014.08 The outlet inverts shall be at least four inches above the distribution box floor.

014.09 When septic tank effluent is delivered to the distribution box by pump, either a baffle wall shall be installed in the distribution box or the pump discharge shall be directed against a wall or side of the box on which there is no outlet. The baffle shall be secured to the box and shall extend at least one inch above the crown of the inlet flow line.

015 Header pipe: If a header pipe is used the following criteria shall be observed.

015.01 Header pipe shall have a minimum diameter of 4 inches.

015.02 When a header pipe is used, there shall be an equal number of distribution lines spaced evenly on both sides of the junction of the leader to the header.

015.03 The header pipe shall be laid level with direct watertight connections to each drainfield line and the septic tank outlet pipe. The header pipe shall be encased in filter material.

016 Drop box (see Figures 14.1 and 14.2): When drop boxes are used the following criteria shall be followed:

016.01 The drop box shall be watertight and constructed of durable materials not subject to excessive corrosion or decay.

016.02 The invert of the inlet pipe shall be at least one inch higher than the invert of the outlet pipe to the next trench.

016.03 The invert of the outlet pipe to the next trench shall be at least two inches higher than the invert of the outlet pipe of the trench in which the box is located.

016.04 When septic tank effluent is delivered to the drop box by a pump, the pump discharge shall be directed against a wall or side of the box on which there is no outlet.

016.05 The drop box shall have a removable cover either flush or above finished grade or covered by more than six inches of soil.

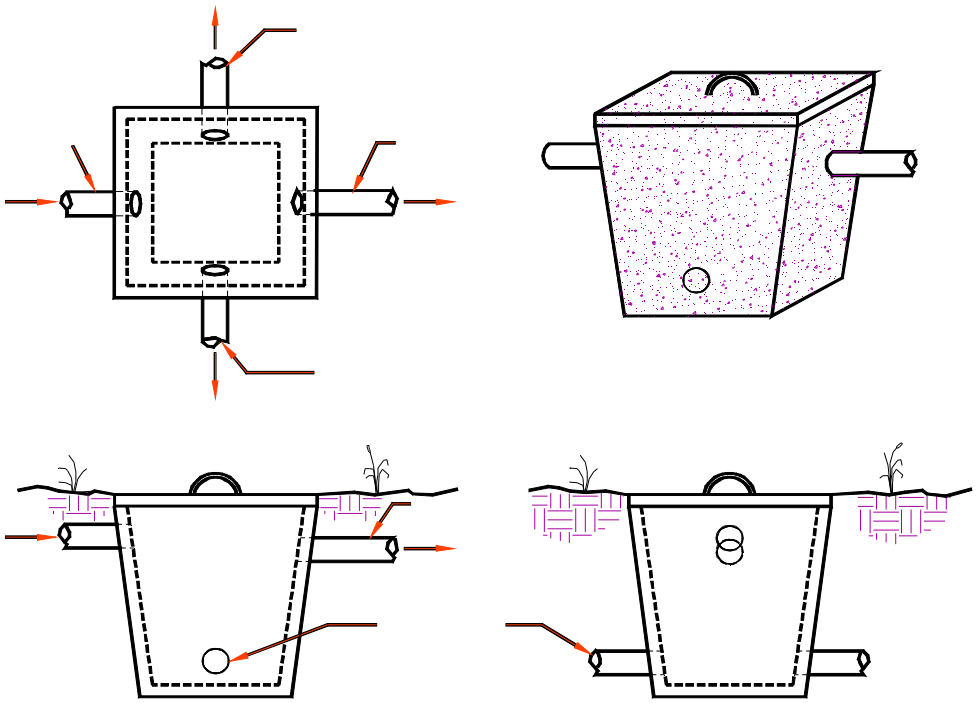


Figure 14.1
Drop Box

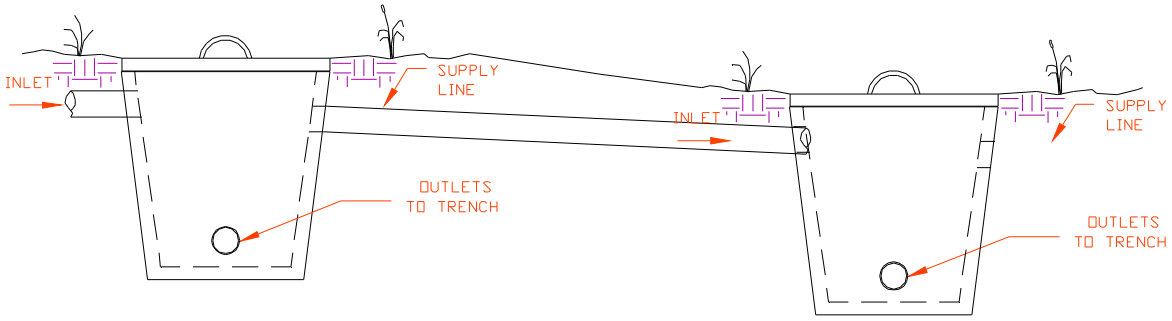


Figure 14.2
Drop Box On A Slope
Profile View

017 Filter Material Absorption Systems

017.01 The trenches shall not be less than 18 inches nor more than 36 inches wide for pipe laterals and no more than 5 feet wide for chambers. Any trench wider than 36 inches for pipes and 5 feet for chambers shall be considered a bed and have the absorption area reduced by the appropriate factor in Section 019.03. See Figures 14.3 and 14.4.

017.02 There shall be a layer of at least six but not more than 24 inches of filter material in the bottom of the trenches and beds. See Figures 14.3 and 14.4.

017.03 Distribution pipes, gravity distribution.

017.03A Distribution pipes used in trenches or beds for gravity flow distribution shall be at least four inches in diameter and constructed of sound and durable material not subject to corrosion or decay or to loss of strength under continuously wet conditions. When open joint tile is used, the tile sections shall be spaced not less than 1/4 inch nor more than 1/2 inch apart.

017.03B Perforated pipe used for wastewater distribution pipes shall have one or more rows of holes of no less than one-half inch in diameter and no more than 3/4 inch in diameter spaced no more than 36 inches apart. Holes shall be spaced to prevent failure of pipe due to loads. Distribution pipes shall have a load bearing capacity of more than 1000 pounds per linear foot.

017.03C Half moon concrete or plastic tile may be used for wastewater distribution and shall be placed in trenches resting on concrete blocks suitably placed before filter material is added unless specifically designed to be self supporting on the gravel bed with an appropriate supporting foot. See Figure 14.4.

017.04 The filter material shall completely encase the disposal pipes and chambers to a depth of at least two inches. See Figures 14.3 and 14.4.

017.05 The filter material shall be covered with untreated building paper or a two-inch layer of hay or straw or similar, approved permeable materials. See Figures 14.3 and 14.4.

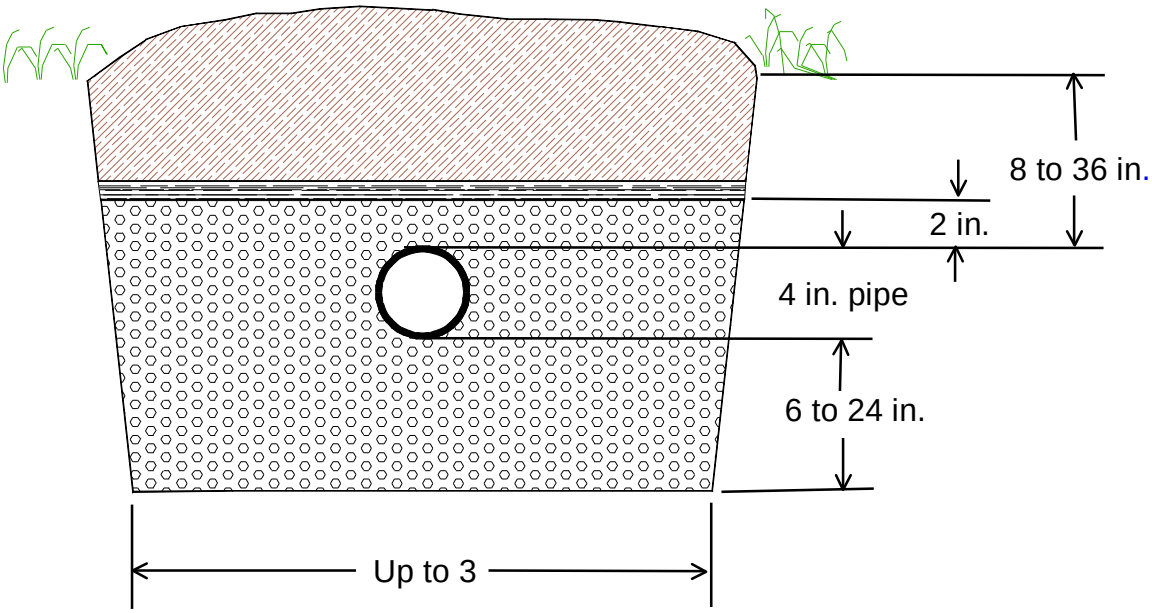


FIG 14.3
Filter material with 4 inch pipe

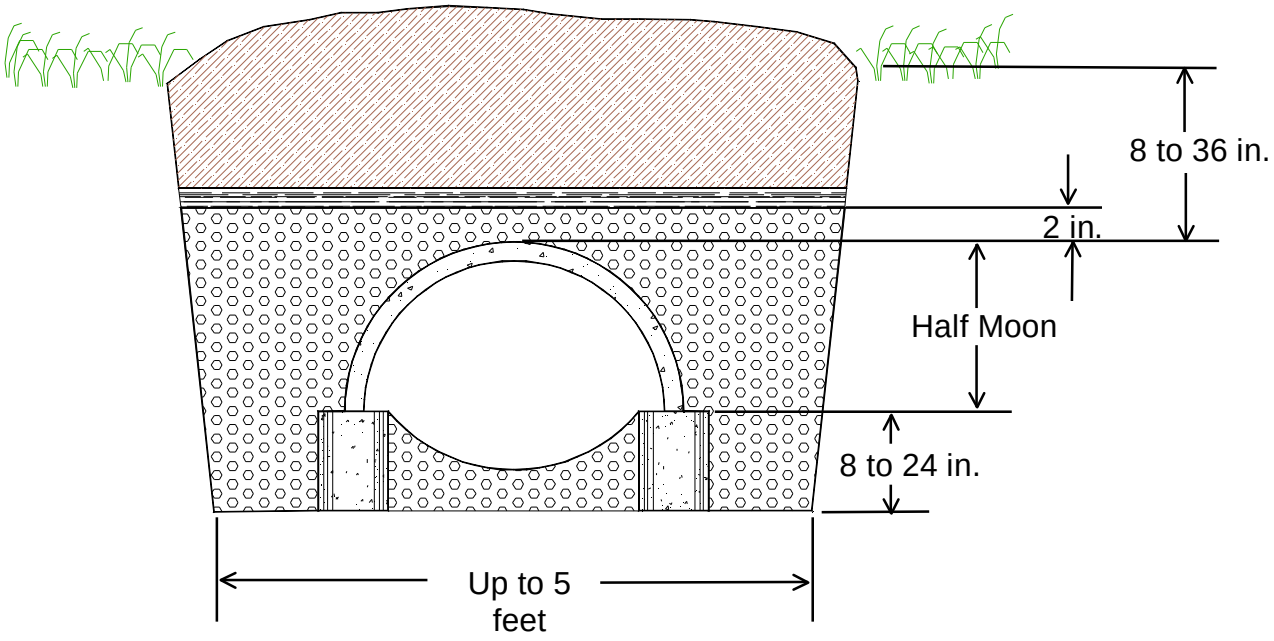


FIG 14.4
Filter material and chambers

018 Non Filter Material Absorption Systems

018.01 Gravelless pipes and chambers may be used for effluent treatment under the following conditions.

018.01A Pipes and chambers shall be of durable, non-degradable construction (Figures 14.5, 14.6, 14.7) specifically designed for installation without filter material.

018.01B Pipes and chambers shall be able to meet load requirements of 1000 lbs per linear foot.

018.02 Non Filter Material Effective Trench Bottom Area Square Footage

018.02A Systems using pipe with filter fabric specifically designed for gravelless use shall use 75% of the outside perimeter of the pipe, up to a 12 inch diameter pipe, as the effective width of the trench. A construction permit as outlined in Chapter 3 is required when using 12 inch or larger diameter pipe.

018.02B Systems using chambers with at least six inches of slotted sidewall, specifically designed for gravelless use may use up to 1.50 times the bottom width of the chamber, measured as the distance between the inside edges of the base flanges, as the effective width of the trench. (See Fig. 14.7) The effective width of the trench shall not exceed five feet for design purposes.

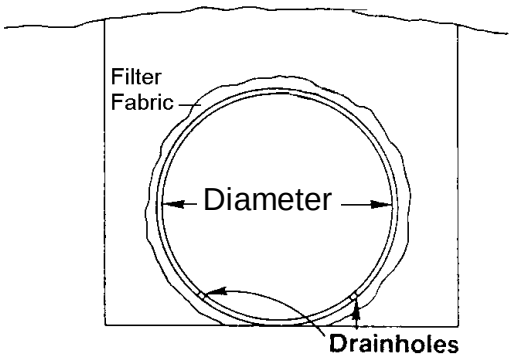


FIG 14.5
Gravelless Pipe with Filter
Fabric

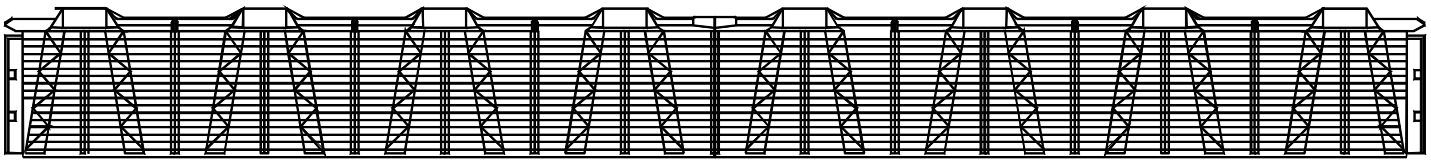


FIG 14.6
Gravelless
Chamber Profile
View

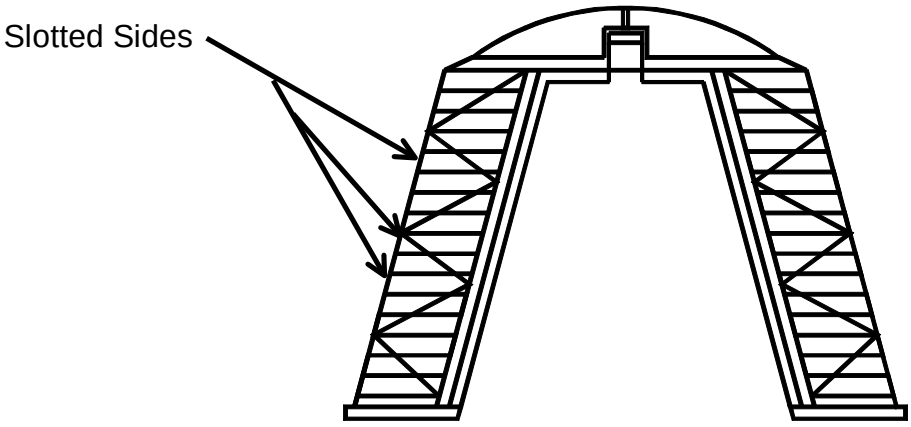


FIG 14.7
Gravelless Chamber
End View

019 Absorption Trench Sizing:

019.01 The required square footage for an absorption trench for a dwelling shall be determined by Table 14.1 when a percolation test was performed.

TABLE 14.1

Square Feet of Drain Field Trench Required for Single Family Dwelling

Perc Rate in minutes per inch	**1** Bedroom 200 gpd	**2** Bedroom 300 gpd	**3** Bedroom 400 gpd	**4** Bedroom 500 gpd	**5** Bedroom 600 gpd	**6** Bedroom 700 gpd	**7** Bedroom 800 gpd	**8** Bedroom 900 gpd	**9** Bedroom 1000 gpd
<5	Systems must be designed with a 12 inch loamy sand liner that would have a percolation rate of 15 to 20 minutes per inch and shall be designed at the 11-20 minute per inch level								
5-10	165	330	495	660	825	990	1155	1320	1485
11-20	210	420	630	840	1050	1260	1470	1680	1890
21-30	250	500	750	1000	1250	1500	1750	2000	2250
31-40	275	550	825	1100	1375	1650	1925	2200	2475
41-50	330	660	990	1320	1650	1980	2310	2640	2970
51-60	350	700	1050	1400	1750	2100	2450	2800	3150
>60	Systems must be designed by a professional engineer. Construction Permit Needed								

019.02 The required square footage for establishments shall be determined by the following equation: The daily design flow divided by (Five divided by the square root of the percolation rate). $sq.ft. = design.flow(gpd) \div [5 \div \sqrt{percolation(\min/in)}]$.

019.03 Absorption area for a bed shall be calculated by determining the required square footage for a trench and multiplying the area by the factor from Table 14.2.

TABLE 14.2

Absorption Bed Multiplication Factor

Width of Bed in feet	Factor
>3 to 10	1.25
>10 to 15	1.33
>15 to 20	1.50
>20	Unacceptable

020 Dosing.

020.01 Dosing is recommended for all systems and shall be provided when the design wastewater flow requires more than 500 linear feet of distribution line. When the design wastewater flow requires more than 1,000 linear feet of distribution line, the absorption field shall be divided into two equal portions and each half dosed alternately, not more than four times per day.

020.02 Dosing may be accomplished by either pumps or siphons. Each side of the system shall be dosed not more than four times per day. The volume of each dose shall be the greater of the daily wastewater volume divided by the daily dosing frequency, or an amount equal to approximately 3/4 of the internal volume of the distribution lines being dosed (approximately 0.5 gallons or 1.89 L per linear foot of 4-inch pipe.)

Enabling Legislation: Neb. Rev. Stat. §81-1505(8).

Legal Citation: Title 124, Ch. 14, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

Title 124 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 15 - MAINTENANCE OF SEPTIC SYSTEMS AND LAGOONS

001 The owner of any septic tank or his agent shall regularly inspect and arrange for the removal and sanitary disposal of septage from the tank whenever the top of the sludge layer is less than 12 inches below the bottom of the outlet baffles or whenever the bottom of the scum layer is less than three inches above the bottom of the outlet baffle.

002 Disposal of septage shall be in accordance with Federal, State and local rules and regulations.

003 The owner of a lagoon shall inspect, operate and maintain the lagoon in the following manner:

003.01 The lagoon shall be maintained with a minimum of two feet of liquid depth. Care shall be taken to pump additional water to offset evaporation loss during hot weather.

003.02 The lagoon area shall be mowed to keep grass and other plants at 6 inches or less in height on the lagoon slopes and top of dike.

003.03 The lagoon shall be operated to prevent the liquid level from encroaching on the one foot freeboard requirement of the lagoon.

003.04 Solids will be removed from the lagoon if needed and disposed of in accordance with federal, state, and local regulations.

004 To prevent soil erosion, all areas above the planned waterline and outside the lagoon which were disturbed during construction shall be seeded or sodded. Short grasses, such as blue grass are preferred and shall be mowed frequently to prevent overhanging vegetation. Alfalfa or similarly long rooted grasses which might damage the integrity of the lagoon shall not be used. No vegetation shall extend above the top of the dike within a fifty foot radius of the lagoon, including trees, weeds and brush.

Enabling Legislation: Neb. Rev. Stat. §81-1505(8).

Legal Citation: Title 124, Ch. 15, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

Title 124 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 16 - TYPE OF WASTE

001 The type of waste that can be directed to an on-site wastewater treatment system is limited to domestic wastewater. The following wastes are prohibited from entering an on-site wastewater treatment system unless approved in an operating permit issued for the system.

001.01 Cooling water, ground water infiltration, discharge from roof drains, discharge from foundation tile drains, swimming pool wastewater, or other clear water discharges.

001.02 Hazardous waste: Any chemical substance or material, gas, solid, or liquid designated as hazardous in accordance with Title 128 – Nebraska Hazardous Waste Regulations.

001.03 Those pollutants or combination of pollutants or disease causing agents, which after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will on the basis of information available to the Department cause either death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations on such organism or its offspring.

002 The discharge of motor vehicle wastes to a septic system is prohibited. For the purposes of these regulations, “motor vehicle” means mechanized equipment used in agriculture, construction, industrial activities, maintenance, recreation, or transportation.

Enabling Legislation: Neb. Rev. Stat. §81-1505(8).

Legal Citation: Title 124, Ch. 16, Nebraska Department of Environmental Quality.

NEBRASKA ADMINISTRATIVE CODE

Title 124 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 17 - CLOSURE OF SEPTIC TANK AND LAGOON SYSTEMS

001 Whenever the use of an onsite wastewater treatment system is discontinued following the connection to a sanitary sewer or following condemnation or demolition of a building or property or due to the construction of another on-site wastewater treatment system, the onsite wastewater treatment system shall be properly closed and any further use of the system for any purpose shall be prohibited.

002 One of following two methods shall be used for closure of a septic tank or holding tank;

002.01 Pump and Fill Method: The tank shall be pumped of all liquids and solids and then filled with earth. The earth shall be tamped completely so as to prevent voids which would occur as the result of settling, or

002.02 Pump and Remove Method: The tank shall be removed after being pumped of all liquids and solids and the void left from the tank removal shall be filled in with earth. The earth shall be mounded to provide for future settling.

003 The following method shall be used for closure of a wastewater lagoon:

003.01 The lagoon shall be drained completely of any liquids.

003.02 The fence shall be removed and the settled solids and liner material at the bottom of the lagoon shall be scraped out and properly disposed.

003.03 The lagoon area shall be leveled and filled in with dirt. The dirt shall be mounded over the lagoon area to provide for future settling.

Enabling Legislation: Neb. Rev. Stat. §81-1505(8).

Legal Citation: Title 124, Ch. 17, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

TITLE 124 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 18 LAGOONS - SITE LOCATION AND EVALUATION; DESIGN

001 A site for a lagoon shall permit the unobstructed wind to sweep across the lagoon to provide some mixing action and to add oxygen to the water. Timber must be removed for a distance of at least 50 feet from the outer dike toe of the lagoon.

002 The lagoon shall be located and constructed so it will not receive surface runoff water.

003 A lagoon shall not be installed on a property less than three acres in size, excluding all area below the normal high water level of any surface water feature, all area below a ten-year flood elevation, and all area within the right-of-way or easement of a street, road, or access easement.

004 The lagoon shall be designed for complete retention.

005 The floor of the lagoon shall be located at least two feet above the highest expected groundwater level.

006 The top of the dike shall be at least one foot above the 100 year flood elevation.

007 The lagoon shall be located at least 2 feet above fractured bedrock.

008 Testing of the final seepage rate shall be completed based on soil permeability. The maximum allowable seepage rate is 1/8 inch per day after sealing and compaction. This may be determined by an independent soils laboratory on a undisturbed soil sample taken at the site, or the two barrel method prior to filling, or a comparison test after prefilling with clean water but before introduction of wastewater.

008.01 The two barrel method may be used for soil sealed lagoons before the lagoon is filled. Two similar 55 gallon drums are required, one a control drum with one end removed and the other drum (seepage drum) with both ends removed. One end of the seepage drum is pressed into the sealed soil layer, and a bead of polymer treated bentonite is packed around the inside edge of the drum. The seepage drum is carefully filled with water and kept filled for two or more days to saturate the soil. The test begins with filling each drum equally. Each day the difference in levels is recorded, and the barrels filled to the beginning level. The control drum measures the weather effects

while the seepage drum records seepage plus weather effects. The test should continue for at least seven days.

008.02 The comparison test method may also be used after the lagoon is prefilled. Isolate the lagoon and record the water level changes as a result of seepage and weather effects. The changes resulting from weather effects alone may be measured separately in a nearly full white plastic 5 gallon bucket partially buried near the shore. The test should continue for at least seven days.

009 Lagoon sizing

009.01 The size of lagoon shall be based on the location of the proposed system and the number of bedrooms and/or gallons per day contemplated in the dwelling or establishment served. Regional lagoon size differences are a result of differential climatic conditions related to average evaporation and precipitation.

009.02 The required lagoon size shall be determined by the equation in Section 017 below using the state evaporation (Fig 18.3) and precipitation (Fig 18.4) maps to determine the net evaporation.

010 Dike and floor construction

010.01 The floor of the lagoon shall be level. A difference of plus (+) or minus (-) three inches is permitted. All vegetation shall be removed from the floor of the lagoon. This organic material shall not be used in the construction of the lagoon.

010.02 The soil material of the lagoon floor shall be designed so that it shall not seep more than 1/8th inch per day. If soil borings and tests indicate that the existing soils are not conducive to compaction, then one of the following means of restricting seepage shall be used:

010.02A Soda ash;

010.02B Bentonite; or

010.02C A synthetic liner.

011 The slope of the dikes shall not be steeper than three horizontal to one vertical. The minimum width of the top of the dike shall be 4 feet.

012 The minimum operating depth of the lagoon shall be two feet. The maximum operating depth shall be 5 feet. The dikes shall provide a minimum freeboard of 12 inches.

013 The lagoon shall be equipped with a depth marker.

014 The lagoon shall be fenced with a four foot high woven wire, welded wire, or seven strand barbed wire with the first strand starting three inches from the ground and the following strands spaced evenly. The fence shall be equipped with a standard main gate that is kept locked. The fence shall be placed on the outside edge of the top of the dike or four feet outside the toe of the dike. Signs shall be located on each gate with a warning of "NO TRESPASSING - WASTEWATER LAGOON".

015 Influent line or distribution pipe

015.01 The influent line shall be at least four inches inside diameter and shall have a grade of not less than 1/8 inch per foot.

015.02 The line shall be equipped with clean-outs with tight fitting caps, at every seventy-five feet or less, or where angles greater than forty five degrees are encountered. A clean out shall be located at least one foot above the highest water level and near the outside of the dike embankment.

015.03 The line shall be center discharging and shall discharge on a concrete apron at least 2 feet square.

015.04 The pipe shall have a loading capacity of not less than 1,000 (455 kg) pounds per square foot. Plastic pipe shall be installed and supported in such a manner that there is no deflection during backfilling or compaction.

016 The lagoon shall be filled with surface or groundwater to a depth of two feet before wastewater wastes are discharged into it.

017 Sizing Formula

$$A = (I \div 7.48 \times 365 \times 20) \div [(((EVAP - PRECP) \div 12) \times 20) + LV + ((SEEP \div 12) \times 365 \times 20)]$$

A	=	Area (surface area at maximum operating depth)
I	=	*Inflow in gallons per day*
EVAP	=	*Net evaporation from FIG 18.3 in inches per year*
PRECP	=	*Net precipitation from Figure 18.4 in inches per year*
LV	=	*Lagoon depth between maximum and minimum operating depths (normally three feet)*
SEEP	=	*Seepage rate through lagoon liner in inches per day; 1/8 inch or less allowable.*
7.48	=	*Conversion of gallons per day to cubic feet per day*
365	=	*Conversion from days to one year*
12	=	*Conversion from inches to feet*
20	=	*20 year design life*

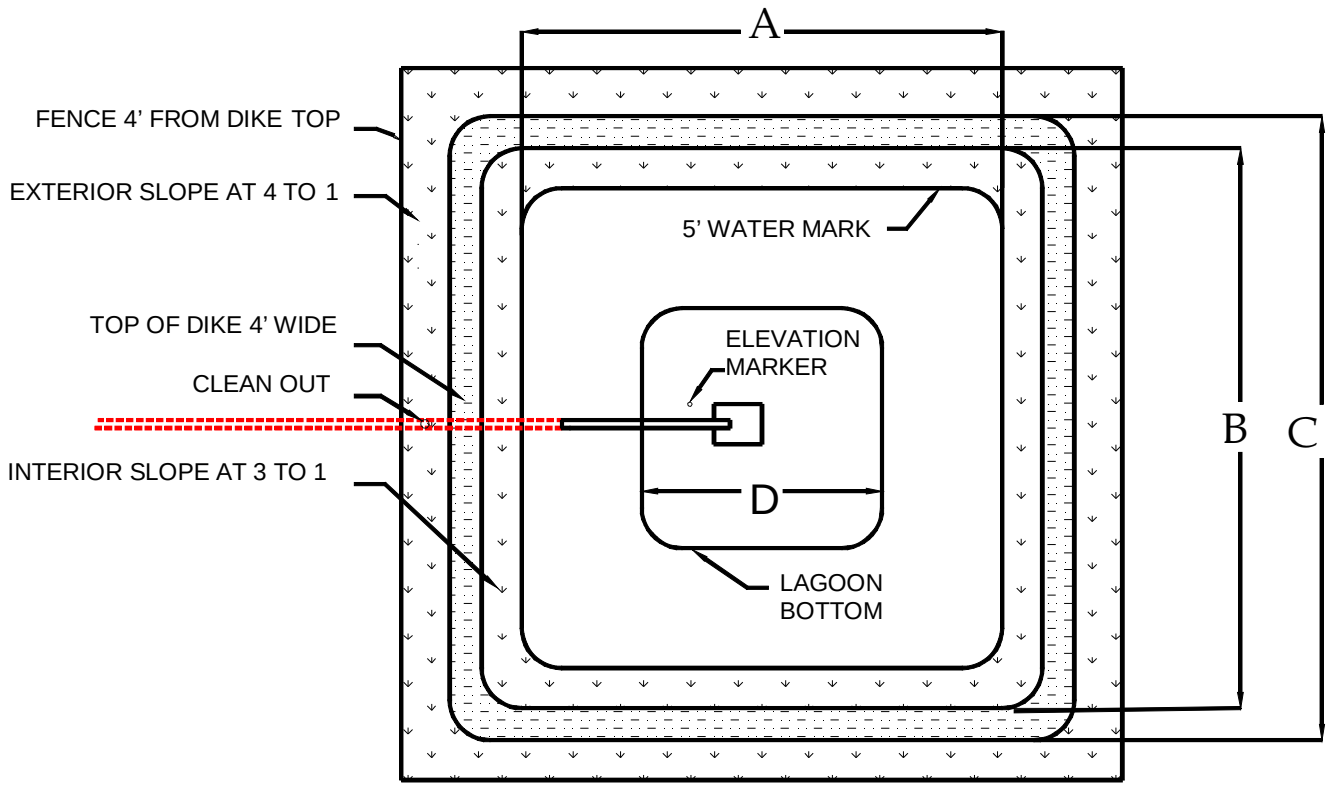
Simplified Equation:

$$A = \frac{I \times 976}{((EVAP - PRECP) \times 1.67) + LV + (SEEP \times 608)}$$

017.01 Take the square root of the area to get the length of a side at the high operating level for a square lagoon. (FIG 18.1, 18.2)

Length of a side $= \sqrt{A}$

017.02 Flow for dwellings shall be estimated at a minimum of 150 gpd + ((Number of Bedrooms - 1) *x* 75 gpd).



A = Width at High Water Mark
B = Width at Inside Top of Dike
C = Width at Outside top of Dike
D = Width at Lagoon Bottom

FIG 18.1 Plan View

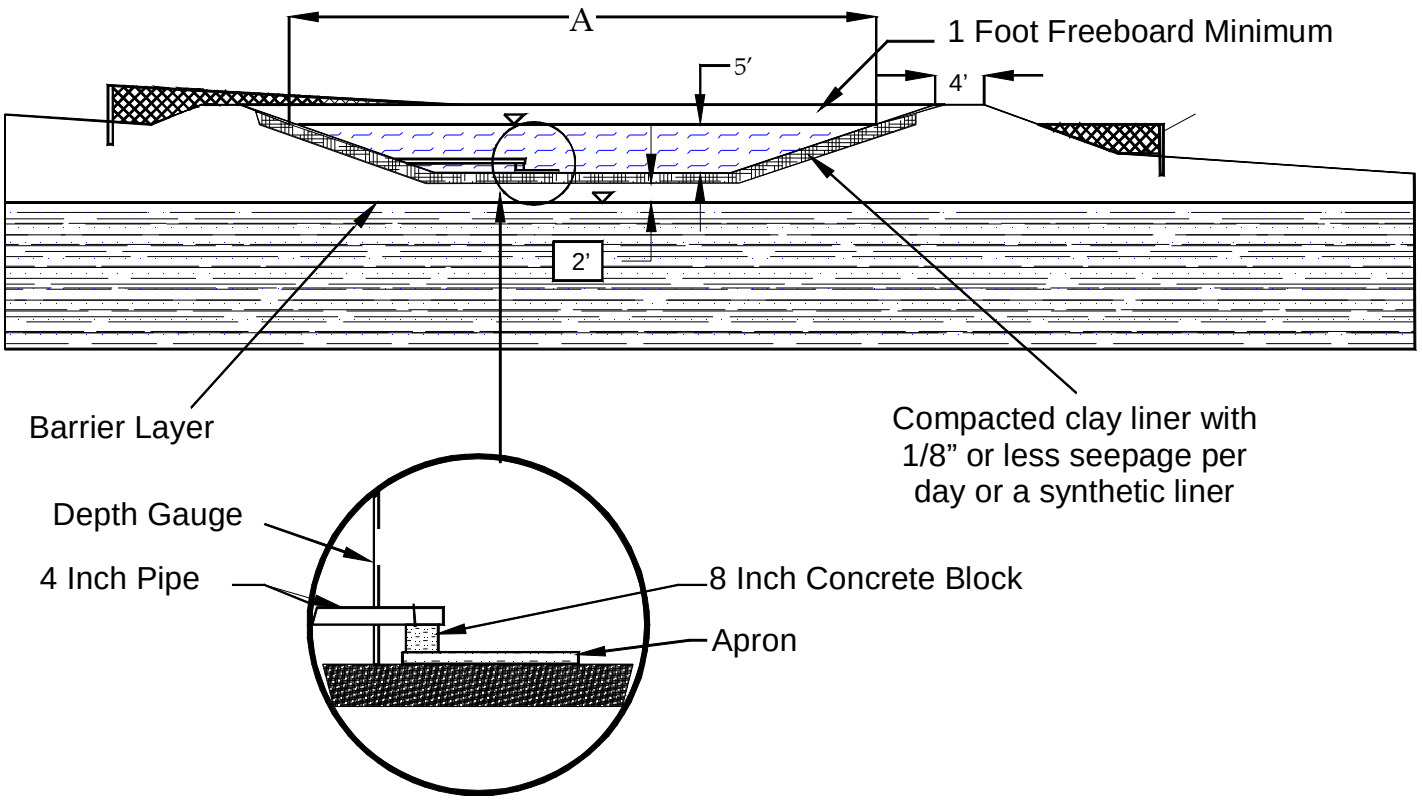


FIG 18.2 Profile View

Total Annual Lake Evaporation

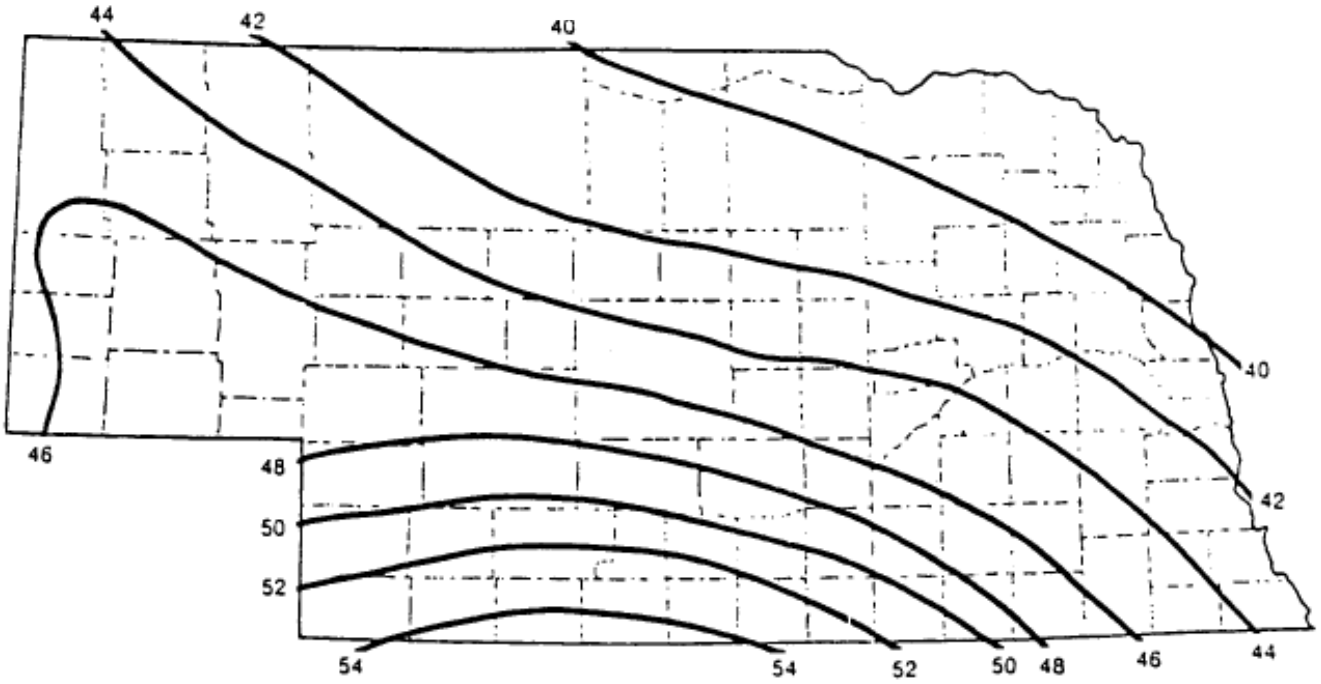


FIG 18.3

Total Annual Precipitation

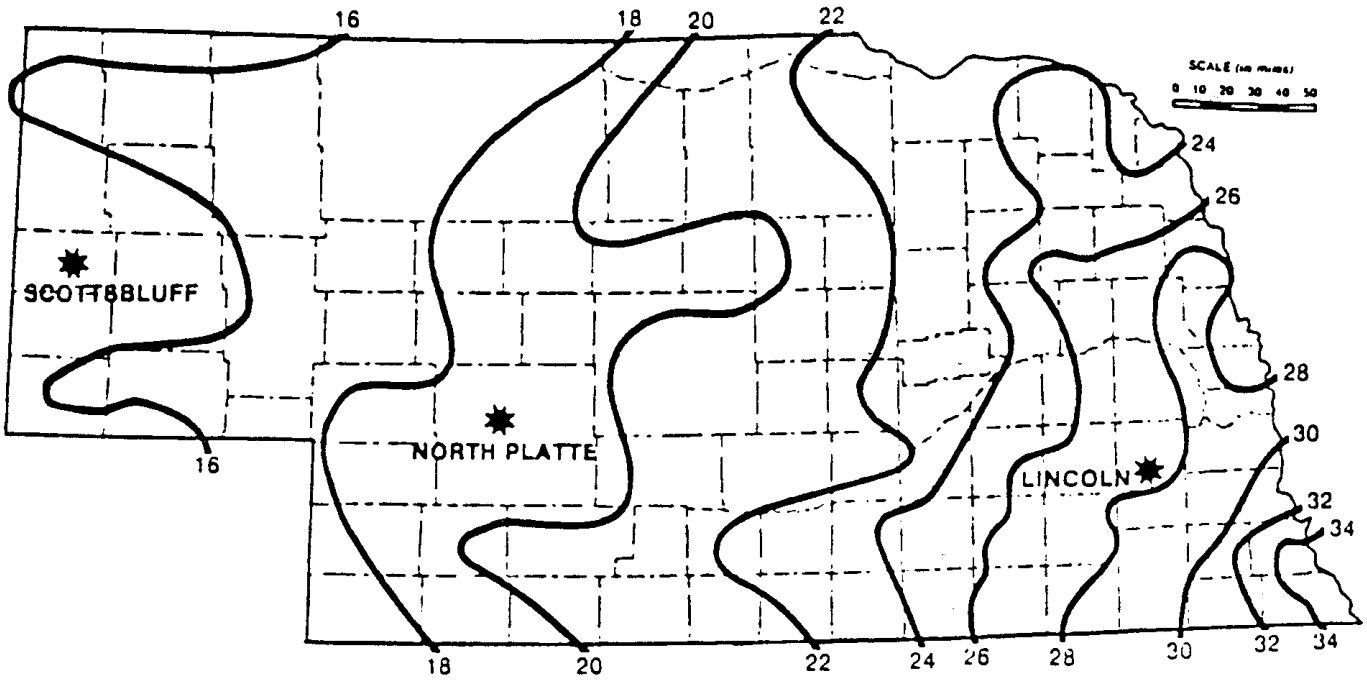


FIG 18.4

Enabling Legislation: Neb. Rev. Stat. 81-1505(8)

Legal Citation: Title 124, Ch. 18, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

Title 124 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 19 - FLOOR DRAINS

001 A floor drain in a dwelling garage may be connected to an onsite wastewater treatment system provided the drain does not receive oil, paint, engine cleaner or hazardous materials and meets design requirements of Section 002. These drains are designed to handle snow and ice melt along with occasional exterior vehicle washing.

002 A floor drain in a dwelling garage that is connected to an onsite wastewater treatment shall meet the following design requirements:

002.01 The drain shall have an integral mud trap and oil separator.

002.02 A valve shall be located immediately following the drain that shall normally be left closed.

003 The design capacity of the onsite wastewater treatment system shall be increased at least 75 gallons to account for a dwelling garage floor drain connection to the system.

004 It is recommended, but not required, that a permanent sign or plate be placed on or within view of the drain stating "WARNING - Water Only! Floor drain leads to an on-site system". This sign is intended to remind current and future owners that the garage drain leads to an on-site wastewater treatment system that cannot properly treat some types of wastes.

005 The discharge of motor vehicle wastes or maintenance shop wastes to a septic system or to a soil absorption system is prohibited. The connection of a floor drain from a maintenance shop to a septic system or soil absorption system is prohibited.

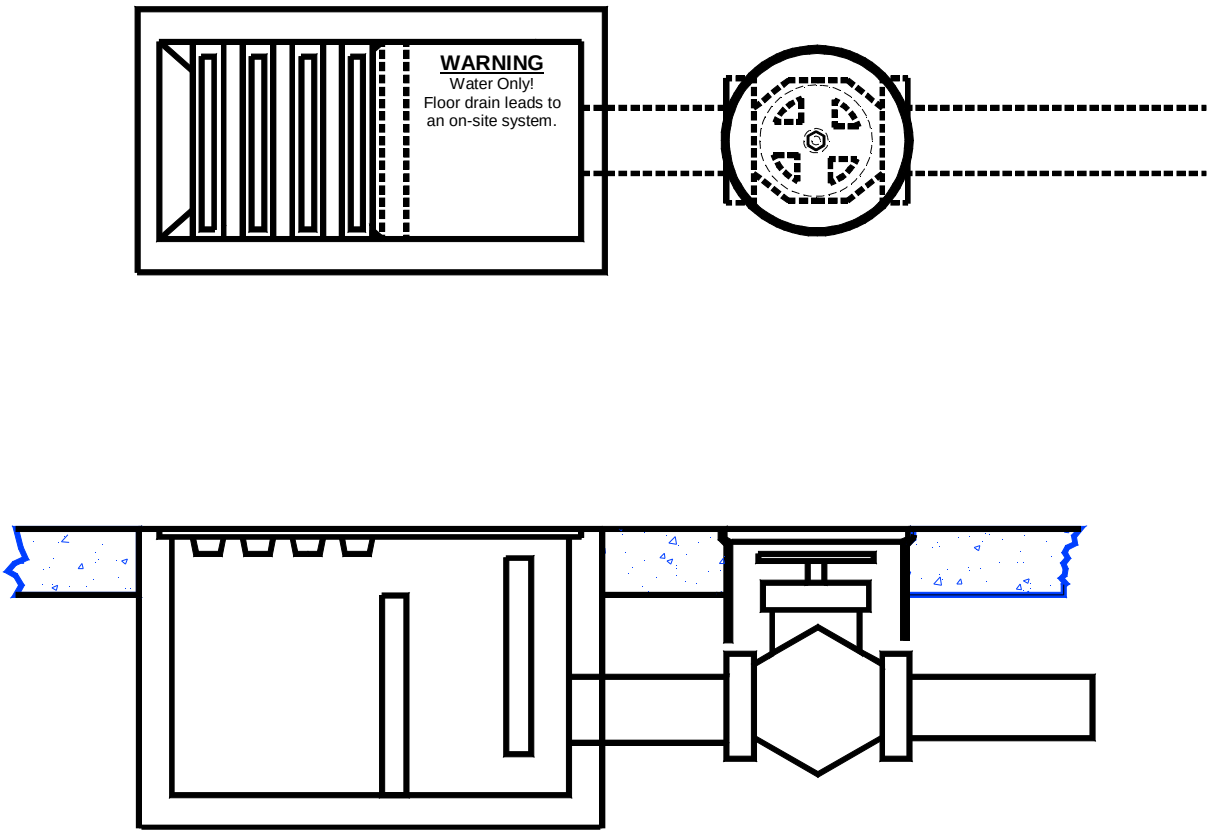


FIG 19.1 Dwelling Garage Floor Drain

Enabling Legislation: Neb. Rev. Stat. §81-1505(8)

Legal Citation: Title 124, Ch. 19, Nebraska Department of Environmental Quality.

NEBRASKA ADMINISTRATIVE CODE

TITLE 124 – NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 20 - CERTIFICATION REQUIREMENTS FOR ON-SITE CERTIFIED PROFESSIONALS

001 Only a certified professional, a professional engineer, a registered environmental health specialist, or a person under their direct supervision may engage in the inspection, pumping, siting, layout, construction, reconstruction, alteration, modification, repair, or otherwise changing of a on-site wastewater treatment system. For the purposes of these regulations, "direct supervision" means the person overseeing the work is physically present on the site where the work is being done and has control over, responsibility for, and professional knowledge of the work being done. The certification requirement does not apply to a private onsite wastewater treatment system at an electric generation facility site owned by a district organized under Nebraska Revised Statutes, Chapter 70, article 6.

002 Certified professionals must hold a valid certificate by examination in accordance with this Title or a hardship certificate in one or more of the following categories:

002.01 Master Installer
002.02 Journeyman Installer
002.03 Soil Evaluator
002.04 Inspector
002.05 Master Pumper
002.06 Journeyman Pumper

003 Authorization to Practice:

003.01 Authorization to Practice under Certificates by Examination:

003.01A A Master Installer or Journeyman Installer is authorized to engage in the siting, layout, construction, reconstruction, alteration, modification, or repair of on-site wastewater systems, except that a Journeyman Installer is only authorized to engage in any of these activities in accordance with the following restrictions:

003.01A.1 The Journeyman Installer is employed by a Master Installer, a professional engineer, or a registered environmental health specialist who is responsible for the work, or

003.01A.2 The Journeyman Installer is employed by a business or government entity that has a Master Installer, a professional engineer, or a registered environmental health specialist as an owner, officer, or employee of the business or government entity who is responsible for the work.

003.01B A Soil Evaluator is authorized to engage in the soil evaluation of on-site wastewater systems.

003.01C An Inspector is authorized to engage in the inspecting or soil evaluation of on-site wastewater systems.

003.01D A Master Pumper or Journeyman Pumper is authorized to engage in the pumping of on-site wastewater systems, except that a Journeyman Pumper is only authorized to engage in this activity in accordance with the following restrictions:

003.01D.1 The Journeyman Pumper is employed by a Master Pumper, a professional engineer, or a registered environmental health specialist who is responsible for the work; or

003.01D.2 The Journeyman Pumper is employed by a business or government entity that has a Master Pumper, a professional engineer, or a registered environmental health specialist who is an owner, officer, or employee of the business or government entity and responsible for the work.

003.02 Authorization to Practice under Hardship Certificates - A person holding a valid Hardship Certificate is authorized to practice in those categories listed on the certificate in accordance with Authorizations to Practice under Certificates by Examination of this Section.

004 No person shall engage in the siting, layout, construction, reconstruction, alteration, modification, repair, or otherwise changing of a private on-site wastewater system unless a Master Installer, a Journeyman Installer, a professional engineer, or a registered environmental health specialist who is responsible for such work is physically present at the site where such work is being performed and is supervising the work, except that a Soil Evaluator or an Inspector may perform soil evaluation for the purpose of aiding in the siting and layout.

005 No person shall engage in the pumping of a private on-site wastewater system unless a Master Pumper, a Journeyman Pumper, a professional engineer, or a registered environmental health specialist who is responsible for such work is physically present at the site where such work is being performed and is supervising the work.

006 No person shall engage in the inspecting of a private on-site wastewater system unless an Inspector, a professional engineer, or a registered environmental health specialist who is responsible for the work is physically present at the site where such work is being performed and is supervising the work.

007 Hardship Certificates:

007.01 Hardship Certificates may be issued to an individual upon:

007.01A Submittal of a request for certification by hardship clearly stating the conditions of the hardship and submittal of evidence supporting competency in the categories in which the individual is seeking certification;

007.01B Submittal of hardship certificate application fee in accordance with the fee schedule in Appendix A; and

007.01C Submittal of a valid, complete application Form E (Appendix B).

007.02 A separate application with application fee will be required for each category of certificate that the applicant applies for.

007.03 All hardship certificates expire 180 days after the date of issuance.

008 Certificates by examination:

008.01 To obtain a certificate by examination in any category, an applicant must pass an examination administered by the Department.

008.02 Expiration: All certificates by examination expire December 31 of every odd-numbered year unless renewed in accordance with this Chapter, except that certificates by examination issued prior to January 1, 2006, will not expire December 31, 2005.

008.03 Application for certificate by examination:

008.03A Applicants for certification by examination shall submit:

008.03A.1 An application for a certificate on Form D (Appendix E);

008.03A.2 The certificate application fee in accordance with the fee schedule (Appendix A);

008.03A.3 An application for examination on Form H (Appendix F); and

008.03A.4 The examination fee in accordance with the fee schedule (Appendix A).

008.03B All applications received less than five (5) days prior to a scheduled examination date may be held for the next scheduled examination date.

008.03C An individual seeking certification by examination in multiple categories of certification may submit a single application for certification and application fee, but must submit a separate application for examination and examination fee, and take a separate examination for each category sought. Where application is made for multiple categories and certification application fees for the categories are different, the applicant shall submit the highest fee.

008.03D Applicants who fail an examination will be permitted to be re-examined at subsequent examinations. Applicants desiring to be re-examined shall submit an application for examination on Form H (Appendix F) and the examination fee in accordance with the fee schedule (Appendix A). Applicants failing three (3) examinations in succession shall obtain a minimum of six (6) hours of approved continuing education prior to re-examination. Failure to pass the examination within two (2) years of the date the application for certification was received shall result in the rejection of the application. Individuals whose application has been rejected who desire certification shall submit a new application for examination and certification and the applicable examination and application fees.

008.03E Adding categories to current certificates:

008.03E.1 A certified professional holding a valid certificate by examination in the Master Installer, Master Pumper, Inspector, or Soil Evaluator category may apply for addition of other categories to the

certificate by submitting an application for examination Form H and examination fee for each additional category.

008.03E.2 A certified professional holding a valid certificate by examination in the Journeyman Installer category may apply to add the Journeyman Pumper category, and a certified professional holding a valid certificate by examination in the Journeyman Pumper category may apply to add the Journeyman Installer category to the certificate by submitting an application for examination Form H and examination fee for the additional category.

008.03E.3 A certified professional holding a valid certificate by examination in the Journeyman Installer category may apply for certification in the category of Master Pumper, Inspector, or Soil Evaluator by submitting a new application for examination Form H and examination fee for each additional category, and submit the difference in certificate fees between the Journeyman Installer certificate fee and the Master Pumper, Inspector, or Soil Evaluator certificate fee.

008.03E.4 A certified professional holding a valid certificate by examination in the Journeyman Pumper category may apply for certification in the category of Master Installer, Inspector, or Soil Evaluator by submitting a new application for examination Form H and examination fee for each additional category, and submit the difference in certificate fees between the Journeyman Pumper certificate fee and the Master Installer, Inspector, or Soil Evaluator certificate fee.

008.03E.5 A certified professional holding a valid certificate by examination in the Journeyman Installer category may upgrade to a Master Installer category, and a certified professional holding a valid certificate by examination in the Journeyman Pumper category may upgrade to a Master Pumper category, by submitting a completed application for certification and the difference in certificate fees between the two certificates.

008.04 Renewal of certificates by examination:

008.04A To renew a valid certificate, the certified professional must submit the following to the Department:

008.04A.1 A properly completed, signed, and dated application for renewal on Form D (Appendix E);

008.04A.2 Record of fulfillment of continuing education requirements on Form K (Appendix H); and

008.04A.3 The certificate renewal fee in accordance with the fee schedule (Appendix A).

008.04B If the Department does not receive the renewal application Form D, renewal fee, and record of continuing education Form K prior to the expiration date of the certificate, the certificate shall expire.

008.04C The certificate of any certified professional who fails to comply with the continuing education requirements of this Chapter will expire on the expiration date of the certificate.

008.04D To renew a certificate that has expired or to obtain a new certificate following revocation of a certificate, a person shall submit an application for certification Form D (Appendix E) and the certificate fee. For each category of certification desired, the individual shall also submit an application for examination Form H (Appendix F) and examination fee for each category, and pass the examination in each category.

008.04E The Department will not renew a certificate or issue a new certificate to an individual whose certificate has been revoked until at least one year has passed since the date of revocation.

008.05 Examination Development and Administration:

008.05A Examinations for certification will be developed and administered by the Department.

008.05B Examinations for certification shall be designed to test the general knowledge of the applicants regarding on-site wastewater construction standards, soils and geology of the state, rules and regulations of this Title, and any other knowledge the Department deems essential to the successful practice of the profession for which certification is requested.

008.05C The examinations will be by open book testing.

008.05C.1 The Department shall make available to each examinee at the test site a copy of this Title and other documents which cover the subject matter tested in the exam. All materials provided to the examinee by the Department for use during the examination shall remain the property of the Department and be returned upon completion of the exam.

008.05C.2 Any such materials brought by examinees to the examination site for use in completing the examination may be subject to inspection by examination proctors without advance notice to examinees.

008.05C.3 Use of equipment capable of copying or reproducing the examination, by the examinee, shall not be allowed during the examination.

008.05C.4 Use of telephonic or radio equipment, by the examinee, shall not be allowed during the examination.

008.05D With good and sufficient cause shown, the Department may provide for special arrangements for administering the examinations, which to the extent possible, will accommodate special circumstances of an applicant without compromising the examination purposes or integrity. Such special circumstances may include but not be limited to reading difficulties, physical skills limitations or absence from the state during regular examination dates. Accommodations may include special proctors or readers, oral examination, dictation of answers or use of non-resident proctors.

008.05E Applicants must show photographic identification at the examination site to be admitted for examination.

008.05F All applicants will be notified in writing regarding examination results. Results will be either pass or fail.

008.05G Applicants who pass an examination in any category will be issued a certificate in that category. A passing grade of 80% shall be required for certification in any category.

009 Continuing Education:

009.01 Beginning January 1, 2006, a certified professional shall successfully complete a minimum of twelve (12) professional development hours of continuing education during every two-year certificate period. Completion prior to January 1, 2006 of continuing education programs approved in accordance with this Title shall be accepted for the purposes of complying with this requirement.

009.02 One professional development hour (PDH) means at least 60 minutes spent in educational activity. Professional development time shall be recorded to the nearest tenth of an hour (0.1 hours or six minutes).

009.03 A maximum of six (6) professional development hours acquired in excess of the minimum hours required during any certificate cycle may be carried over into the next two-year certificate cycle.

009.04 All professional development hours for certificate renewal shall be from courses or programs pre-approved by the Department to insure that the training is appropriate, directly associated with the on-site wastewater industry, covers topics related to the responsibilities carried on by the certified professional, and provides information or training that serves to enhance a certified professional's knowledge of and ability to perform activities that protect the public health and the environment.

009.05 Approval of Continuing Education Programs and Courses.

009.05A Any continuing education programs or courses shall be approved by the Department for use as continuing education for purposes of fulfilling the education requirements of a certified professional prior to the use of programs or courses for that purpose.

009.05B A continuing education provider shall submit to the Department its proposed program or course for approval not less than sixty (60) days prior to the date the proposed program or course is offered for presentation.

009.05C A continuing education provider shall not advertise or otherwise represent any program or course as approved for meeting the continuing education requirements of this Title until such program or course is approved by the department.

009.05D The continuing education provider shall demonstrate that the instruction or presentations will be conducted by individuals qualified in the program or course topic and adequate biographical information shall be submitted for Department review and verification.

009.05E The continuing education provider shall submit an outline of the program or course with adequate detail to verify the topics of presentation, including detailed time lines to show the hours of education presentation planned.

009.05F The continuing education provider shall demonstrate adequate capability of documenting and maintaining records of attendance at the program or course, and shall agree to provide the Department a list of attendees who have completed the program or course within 30 days of its completion.

009.05G A certified professional may at his or her discretion submit a proposed program or course for approval if the provider has not submitted the same for consideration. Any such submission, which is approved, shall thereafter be eligible for use as continuing education by any attending certified professional. The submitted information must include the contact name, address, and telephone number for the sponsoring organization or provider and the program or course agenda with adequate detail to verify the topics of presentation, including detailed time lines to show the hours of education presentation planned and the name of the presenter for each topic.

009.05H If the application for approval is submitted by a certified professional without participation in the application by the continuing education provider, the certified professional shall submit a description of the means by which the continuing education provider has or will document attendance and how the applicant has or will obtain and maintain records of attendance.

009.05I The Department will evaluate and determine the number of professional development hours that a certified professional can claim for successful, documented completion of the course or program.

009.06 A maximum of two (2) professional development hours in each two-year certification cycle may be from pre-approved courses peripheral to the actual activity of the on-site wastewater industry if it is related to the business of contracting for such services such as business tax law, accounting, or insurance, or the safety and protection of work activities from physical or environmental hazard.

009.07 Continuing education records shall be maintained by the certified professional and submitted to the Department on Form K in Appendix H as part of application for certificate renewal.

009.08 Continuing education records including evidence of participation shall be retained by the certified professional for a minimum of three years and shall be submitted to the Department upon request.

009.09 The Department may waive or exempt a certified professional from continuing education requirements or extend the period for completion of the required continuing education, in whole or in part, for any period for which the certified professional submits documentation supporting an exemption for circumstances beyond his or her control which prevented completion of such requirements.

010 Endorsements:

010.01 Endorsements shall be issued, upon successful completion of examination, authorizing certified professionals to engage in special activities or procedures that require advanced training or skills identified in this Title as requiring an endorsement to perform.

010.02 An endorsement to engage in a special activity or procedure shall only be issued to those persons holding a valid certificate in the appropriate categories as identified in the rules and regulations for such special activity or procedure.

010.03 Application and examination for endorsement:

010.03A Application for endorsement shall include submittal of an application on Form L (Appendix J), and submittal of the examination fee in accordance with the fee schedule (Appendix A). A separate application form and examination fee shall be required for each endorsement.

010.03B All applications received less than five (5) days prior to a scheduled examination date may be held for the next scheduled examination date.

010.03C Applicants will be required to show photographic identification at the examination site to be admitted for examination.

010.03D Use of equipment capable of copying or reproducing the examination, by the examinee, shall not be allowed during the examination.

010.03E Use of telephonic or radio equipment, by the examinee, shall not be allowed during the examination.

010.03F All applicants will be notified in writing regarding examination results. Results will be either pass or fail.

010.03G Applicants who pass an examination for endorsement will be issued an endorsement to their certificate.

010.03H Applicants who fail an examination will be permitted to be re-examined at subsequent examinations. Applicants desiring to be re-examined shall submit an application for examination on Form L (Appendix J) and the examination fee in accordance with the fee schedule (Appendix A).

010.04 Endorsements shall be automatically renewed upon the renewal of the certificate to which they are attached.

010.05 Endorsements shall expire upon the expiration, suspension, or revocation of the certificate to which they are attached. An individual whose endorsement has expired who desires to obtain a new endorsement shall re-apply for endorsement by examination in accordance with requirements this section. Upon successful completion of the requirements, a new endorsement shall be issued.

011 All fees are nonrefundable.

012 A certified professional shall only practice in the categories in which they hold a valid certificate.

Enabling Legislation: Neb. Rev. Stat. §81-15,244; 81-15,247; 81-15,248; & 81-15,252

Legal Citation: Title 124, Ch. 20, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

TITLE 124 – NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 21 - REVOCATION, SUSPENSION OR REFUSAL TO GRANT CERTIFICATION

001 The Director may revoke or suspend the certificate of, or refuse to grant a certificate, following opportunity for hearing, upon any reasonable ground including, but not limited to, the following:

001.01 Falsification of certification application.

001.02 Falsification of sworn affidavit for certification.

001.03 Violations of the rules and regulations of the Environmental Quality Council.

001.04 Violations of the Nebraska Environmental Protection Act.

001.05 The practice of fraud or deception.

001.06 Failure to submit a complete, valid certification application form.

001.07 Failure to submit required application fee.

001.08 Failure to successfully complete examination requirements of these rules and regulations.

001.09 Failure to perform requirements of these rules and regulations, including failure to register on-site wastewater systems.

001.10 Falsification of system registration information.

001.11 Failure to meet continuing education requirements required by these rules and regulations.

001.12 Failure to submit required registration fee.

001.13 Failure to submit required late registration fee.

002 Violation of the above Section 001 may also result in a civil or criminal prosecution.

003 Notice of revocation or suspension action shall be issued by the director through certified mail to the affected certificate holder at that individual's last known address. That notice shall state the reason(s) for the action, the effective date of the action and the steps the certificate holder may take to contest the action.

004 Hearing procedures shall be pursuant to Title 115 – Rules of Practice and Procedure.

Enabling Legislation: Neb. Rev. Stat. §81-15,249; §81-15,251; §81-15,253.

Legal Citation: Title 124, Ch. 21, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

TITLE 124 – NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 22 - REGISTRATION OF ON-SITE WASTEWATER TREATMENT SYSTEMS

001 On or after January 1, 2004, any on-site wastewater treatment system constructed, reconstructed, altered, modified, or otherwise changed by a certified professional, professional engineer, or registered environmental health specialist shall be registered with the Department by the certified professional, professional engineer, or registered environmental health specialist within forty-five (45) days of completion of the construction, reconstruction, alteration, modification, or other change, except that a certified professional, professional engineer, or registered environmental health specialist inspecting, pumping, or performing repair, as defined by Chapter 1, to a system is not required to register the system. The registration requirement does not apply to a private onsite wastewater treatment system at an electric generation facility site owned by a district organized under Nebraska Revised Statutes, Chapter 70, article 6.

002 The certified professional, professional engineer, or registered environmental health specialist shall submit the registration on Form G in Appendix D, shall include the non-refundable registration fee, and shall include, if applicable, the non-refundable late registration fee for any registration submitted more than 45 days after completion. The fee schedule is in Appendix A. For registration and late fee purposes, "submitted" means postmarked or received by the Department.

003 The system registration fee and late fee shall be as prescribed in the fee schedule of Appendix A.

004 The certified professional, professional engineer, or registered environmental health specialist shall provide a copy of the system registration form to the system owner.

Enabling Legislation: Neb. Rev. Stat. §81-15,244; 81-15,247; 81-15,248; & 81-15,252

Legal Citation: Title 124, Ch. 22, Nebraska Department of Environmental Quality

NEBRASKA ADMINISTRATIVE CODE

Title 124 - NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 23 – TANK PUMPING AND DOMESTIC SEPTAGE DISPOSAL

001 Domestic septage shall be removed from a septic tank whenever the top of the sludge layer is less than 12 inches below the bottom of the outlet baffles, whenever the bottom of the scum layer is less than three inches above the bottom of the outlet baffle, or whenever the top of the scum layer is within one inch of the top of the outlet baffle.

002 Domestic septage shall be removed from a holding tank whenever the liquid level reaches 90% of effective tank capacity.

003 Tank contents shall be stirred, mixed, or agitated to suspend all solids in the liquid prior to removing the contents for disposal.

004 The entire contents of the tank, liquids and solids, shall be removed. If tank is refilled after pumping, it shall be filled with clear water.

005 Tank shall be pumped through the access manhole. Pumping of tank through baffle inspection ports is prohibited unless no other access port or manhole exists and the integrity of the baffle is maintained.

006 Disinfectant or anti-bacterial products shall not be used to clean the tank except in preparing the tank for abandonment.

007 The allowable methods for disposal of domestic septage shall be discharge to a publicly owned wastewater treatment facility, land application, or other methods approved by the Department.

008 Domestic septage may be discharged to a publicly owned wastewater treatment facility that has a designated or certified operator certified with the Department provided that the septage is discharged with written permission of and under all rules, regulations, guidelines, directions, and requests of the facility owner or operator.

009 Domestic septage may be land applied under the following conditions:

009.01 Only non-public contact sites such as agricultural land, forests, and reclamation land shall be used for land application of domestic septage.

009.02 Land application of domestic septage without the landowner's written permission is prohibited.

009.03 Land application of domestic septage is prohibited within the setback distances in Table 23.1.

TABLE 23.1

Feature	Minimum Setback
Surface Water:	100 ft. (30 m.)
Public Drinking Water Supply Wells:	1000 ft. (300 m.)
All Other Water Wells:	200 ft. (60 m.)
Water Lines:	50 ft. (15 m.)
Property Line:	200 ft. (60 m.)
Public Road Right-of Way:	200 ft. (60 m.)
Buildings used for human occupancy:	500 ft. (150 m.)

009.04 Vector attraction reduction requirements:

009.04A Untreated domestic septage shall be injected below the surface of the land and no significant amount of septage shall be present on the land surface within one hour after injection, or

009.04B Untreated domestic septage shall be incorporated into the soil by disking or plowing within six (6) hours after application.

009.04C Domestic septage that is applied to the land surface and is not injected or plowed-in within six hours shall be treated prior to application by raising and holding its pH at a level of 12 or higher for a minimum of 30 minutes. The minimum treatment method for raising the pH of the domestic septage shall be the addition and thorough mixing of no less than 50 pounds of hydrated lime per 1000 gallons of septage.

009.05 Crop, grazing and site restrictions, and pathogen reduction requirements:

009.05A Land application of domestic septage is prohibited:

009.05A.1 On land from which human food crops with harvested parts below the ground such as but not limited to potatoes or beets will be harvested in the next 38 months after application;

009.05A.2 On land from which human food crops with harvested parts touching the ground surface such as but not limited to melons will be harvested in the next 14 months after application;

009.05A.3 On land from which human food crops with harvested parts that do not touch the ground surface such as but not limited to dry edible beans or sweet corn will be harvested in the next 30 days after application;

009.05A.4 On land from which crops grown for animal food or fiber will be harvested in the next 30 days after application;

009.05A.5 On land on which turf grass is grown for transplantation to lawns and other areas with potential for frequent human contact;

009.05A.6 On land on which livestock will be grazed in the next 30 days after application; and

009.05A.7 In areas readily accessible or frequently used by the public such as but not limited to parks, golf courses, sports fields, recreational lands, or residential or business development areas.

009.05B Public access to land where septage is applied shall be restricted by fencing, no-trespassing signs, or remoteness for a minimum of 30 days after application of septage.

009.05C The Pumper, Master Pumper, Journeyman Pumper, registered environmental health specialist, or professional engineer applying the domestic septage shall inform the land owner of all harvesting, grazing, and site access restrictions.

009.06 Land application of domestic septage at a rate that exceeds the amount of nitrogen required by the crop or vegetation is prohibited. When calculating maximum nitrogen application rates, all other sources of nitrogen such as livestock manure or commercial fertilizer shall be deducted from total nitrogen requirement.

009.07 Domestic septage shall be spread, sprayed, or injected in a manner that does not cause localized pooling, ponding, or runoff. Application of septage using a rate or method that creates a layer of septage exceeding 1/4" thick at any location on the ground surface immediately following application is prohibited.

009.08 Land application of domestic septage on saturate, frozen, or snow-covered ground is prohibited.

010 Record-keeping requirements:

010.01 The Pumper, Master Pumper, Journeyman Pumper, registered environmental health specialist, or professional engineer shall keep records of all domestic septage pumped for a minimum of five years and shall make the records available to the Department upon request.

010.02 When domestic septage is disposed of at a publicly owned wastewater treatment facility, the following information shall be recorded for each load disposed:

010.02A Date of disposal.

010.02B Name and location of treatment facility.

010.02C Total gallons disposed per load.

010.02D Date of pumping of each tank pumped per load.

010.02E Sources (owner name and address of each tank pumped per load).

010.02F Gallons pumped from each source per load.

010.02G Name, certificate or license number, and signature of Pumper, Master Pumper, Journeyman Pumper, registered environmental health specialist, or professional engineer who performed the pumping.

010.03 When domestic septage is disposed of by land application, the following information shall be recorded for each land application site:

010.03A Location and legal description of application site.

010.03B Name and address of application site owner.

010.03C Acreage of site to which septage is applied.

010.03D Type of crop or vegetation, expected yield, and annual nitrogen requirement.

010.03E Maximum rate of septage application based on nitrogen requirement (gallons per year).

010.03F Harvesting or grazing schedule for site.

010.03G Certification statement that pathogen reduction and vector attraction reduction requirements have been complied with.

010.03H For each load of septage applied to the site, the following shall be recorded:

010.03H.1 Date of application.

010.03H.2 Gallons of septage applied.

010.03H.3 Total gallons of septage applied year-to-date at site.

010.03H.4 Sources (owner name and address of each tank pumped).

010.03H.5 Gallons pumped from each source.

010.03H.6 Method of application (surface application, surface application plowed in within six hours, or direct subsurface injection).

010.03H.7 Method of treatment (none, pH adjustment).

010.03H.8 If treated by pH adjustment, pounds of hydrated lime used.

010.03H.9 Name, certificate or license number, and signature of certified Pumper, Master Pumper, Journeyman Pumper, registered environmental health specialist, or professional engineer who applied the septage.

Title124
Chapter 23

Enabling Legislation: Neb. Rev. Stat. §81-1505; 81-15,251.

Legal Citation: Title 124, Ch. 23, Nebraska Department of Environmental Quality.

NEBRASKA ADMINISTRATIVE CODE

TITLE 124 – NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 24 – PRIVATE ONSITE WASTEWATER TREATMENT SYSTEM ADVISORY COMMITTEE

001 The Private Onsite Wastewater Treatment System Advisory Committee shall consist of the following eleven members:

001.01 Seven members appointed by the Director as follows:

001.01A Five certified professionals; and

001.01B Two registered environmental health specialists or officials representing local public health departments which have established programs for regulating private on-site wastewater treatment systems.

001.02 The Director of Health and Human Services Regulation and Licensure or his or her designated representative;

001.03 The Director or his or her designated representative; and

001.04 One representative with experience in soils and geology and one representative with experience in biological engineering, both of whom shall be designated by the Vice Chancellor of the University of Nebraska Institute of Agriculture and Natural Resources.

002 The committee shall meet not less than annually as determined by the Director. The Director may call special meetings of the advisory committee.

003 The committee shall advise the Department on:

003.01 Proposed rules and regulations relating to the Private Onsite Wastewater Treatment System Contractors Certification and System Registration Act;

003.02 Rules and regulations for the siting, layout, operation, and maintenance of private on-site wastewater treatment systems;

003.03 Administration of the Private Onsite Wastewater Treatment System Contractors Certification and System Registration Act as requested by the Director; and

003.04 Development and administration of examinations and continuing education requirements.

003.04A Not less than annually, the committee shall review continuing education course criteria and shall advise the Department on changes to criteria for continuing education course approval decisions.

003.04B Not less than annually, the committee shall review the Department's procedures and resource documents for examination, and shall advise the Department on recommended changes. In the review of examination materials, no member of the committee shall view any examination question unless the member is a professional engineer or a registered environmental health specialist, or is a certified professional who has passed all examinations in which the question may appear.

004 Members shall be reimbursed for their actual and necessary expenses as provided in Neb. Rev. Stat. §§81-1174 through 81-1177 of the Nebraska Revised Statutes.

005 The Department shall provide administrative support for the committee, and shall keep continually current a roster of the members of the committee, including the date of appointment and their term of office.

006 The Director shall appoint a replacement for any member who shall resign or otherwise conclude his or her term on the committee for any position which the Director made the initial appointment. The Director shall select a replacement in accordance with Section 001.01.

007 The members of the committee appointed by the Director shall serve at the pleasure of the Director, but not for more than two four year terms and shall be appointed in accordance with Section 001.01 to fill terms of office.

008 The member designated by the Director of Health and Human Services Regulation and Licensure in accordance with Section 001.02 shall serve at the pleasure and discretion of said Director. Said Director shall notify the Director of the Department by letter bearing his or her signature of any change of his or her designated representative. Upon such change in designation, the representative shall be entitled to participate in committee business only after receipt by the Director of the Department of such notification.

009 Members designated by the Vice Chancellor of the University of Nebraska Institute of Agriculture and Natural Resources in accordance with Section 001.04 shall serve at the pleasure and discretion of the Vice Chancellor. The Vice Chancellor shall notify the Director by letter bearing his or her signature of any change of his or her designated representatives. Upon such change in designation, the representatives shall be entitled to participate in committee business only after receipt by the Director of such notification.

010 Upon approval of the Director, the committee may establish subcommittees and assign special tasks and assignments thereto. No subcommittee shall have authority to take any final actions on any matter assigned to it but shall report its findings and make recommendations to the full committee for actions as necessary and within the purview of the committee.

011 At the first meeting of the committee following the commencement of a fiscal year, the committee shall elect one of its members as chairperson and one of its members as vice chairperson. Those persons shall serve until the next regular meeting of the committee following the commencement of the next fiscal year, or until the elected replacement takes office, whichever occurs first.

012 No action of the committee shall be considered as representing the committee unless a quorum is present. A simple majority (six) of the members of the committee shall constitute a quorum for transaction of business.

013 Notice and conduct of all committee meetings shall be in accordance with the Nebraska Public Meetings laws.

Enabling Legislation: Neb. Rev. Stat. §81-15,245; 81-15,246.

Legal Citation: Title 124, Ch. 24, Nebraska Department of Environmental Quality.

NEBRASKA ADMINISTRATIVE CODE

TITLE 124 – NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 25 – GENERAL PROVISIONS

001 Failure to comply with the requirements of these regulations may be grounds for administrative enforcement proceedings as provided in Neb. Rev. Stat. §81-1507, or penalties in proceedings brought in the discretion of the county attorney or Attorney General pursuant to Neb. Rev. Stat. §81-1508.

002 If any clause, paragraph, subsection or section of these regulations shall be held invalid, it shall be conclusively presumed that the Environmental Quality Council would have enacted the remainder of these regulations not directly related to such clause, paragraph, subsection or section.

003 Any appeal from any final order or final determination of the Director shall be pursuant to Neb. Rev. Stat. §81-1509.

004 Individuals may petition to amend or repeal these rules and regulations by petition in accordance with Title 115 - Rules of Practice and Procedure.

005 These rules and regulations shall become effective five days after filing with the Secretary of State.

006 Permits issued under these regulations are exempt from financial responsibility requirements contemplated in Neb. Rev. Stat. §81-1505(21)(a).

Enabling Legislation: Neb. Rev. Stat. §81-1505(21)(a); Neb. Rev. Stat. §§81-1505(l) and 84-906; Neb. Rev. Stat. §81-1509; Neb. Rev. Stat. §81-1505 and §§84-901 through 84-919; Neb. Rev. Stat. §§84-906 et seq; Neb. Rev. Stat. §§81-1507 and 81-1508.

Legal Citation: Title 124, Ch. 25, Nebraska Department of Environmental Quality.

Title 124

Appendix A

FEE SCHEDULE

Certificate by examination for Master Installer, Master Pumper, Soil Evaluator, or Inspector	$300
Certificate by examination for Journeyman Installer or Journeyman Pumper	$100
Certificate by hardship for Master Installer, Master Pumper, Soil Evaluator, or Inspector	$300
Certificate by hardship for Journeyman Installer or Journeyman Pumper	$100
Renewal of Master Installer, Master Pumper, Soil Evaluator, or Inspector Certificate	$300
Renewal of Journeyman Installer or Journeyman Pumper Certificate	$100
Certification Examination	$50
Registration of Onsite System	$140
Initial Late System Registration – add to system registration fee for any registration either postmarked or received by the Department 46 to 90 days after completion of the system	$150
Final Late System Registration – add to system registration fee for any registration either postmarked or received by the Department 91 days or more after completion of the system	$450
Application for Permit	$450
Application for Subdivision Review and Approval – Fee is for Each Lot Subject to Approval	$450 per lot

NOTE: All fees apply on the effective date. All fees are non-refundable. Fees apply to any documents postmarked on or after, or hand-delivered and received by the Department on or after, the effective date.

Title 124
Appendix B

Form E

Application for Hardship Certificate for Onsite Professionals

NDEQ Use Only

CERT # H _ _ _ _

Ver. Aug. 2007

Please attach documentation supporting basis for hardship request.
(Please type or print)

Last Name	First Name	Middle Initial	_ _ _ - _ _ - _ _ _ _ Social Security Number
Mailing Address ☐ (check to receive official mailings here)	City	State	Zip Code
Business Name			
Business Address Physical Location		City	State
Mailing Address for Business ☐ (check to receive official mailings here)	City	State	Zip Code

Please provide phone numbers in the order of desired contact.

Phone # 1	☐ Home ☐ Office ☐ Cell
Phone # 2	☐ Home ☐ Office ☐ Cell
Phone # 3	☐ Home ☐ Office ☐ Cell

Category of hardship certificate:
(Check each category of hardship certification requested.)

- ☐ Master Installer
- ☐ Journeyman Installer
- ☐ Master Pumper
- ☐ Journeyman Pumper
- ☐ Soil Evaluator
- ☐ Inspector

The application fee for hardship certificate must accompany this application.
See Fee Schedule in Appendix A.

NOTE: Pursuant to the Federal Privacy Act of 1974, we are requesting voluntary disclosure of the social security number from applicants for the sole purpose of ensuring legal residency in the State of Nebraska. This number is currently used in the system to assist in proper identification when there are other individuals with the same name. A certification will not be denied solely because an individual declines to disclose his or her social security number. Applications not containing a social security number may take significantly longer to process because other means may be required to ensure proper record identification.

Make checks payable to the **Nebraska Department of Environmental Quality.**
Mail to NDEQ, Onsite Wastewater Unit, P.O. Box 98922, Lincoln, Nebraska 68509-8922

I swear or affirm that the information and documentation submitted supporting the basis for hardship and evidence of competency to practice in the categories applied for are true and accurate.

_____ Signature of Applicant

_____ Type or print name of Applicant

Title 124
Appendix D

NDEQ Use Only

REG # _ _ _ _ _ _

Fee Rcvd? ____

Onsite System Registration Form G

Existing System Registration #_____ (if previously registered)

(Please type or print) (Must be filed within 45 days of inspection or completion of work)

Ver. Dec. 2006

System Address and Ownership:

Owner's Last Name	First Name	Middle Init	Owner's Phone number

Owner's Mailing Address	City	State	Zip code

System Location Physical Address (if different than owner's)	Nearest Community

System Location (either the Legal Description or the Geographic Coordinates is required):

1/4	1/4	Section #	Twnshp	Range	County	Latitude	Longitude

System Information

System is for: ☐ Dwelling with _____ bedrooms, or ☐ Establishment with _____ gal/day flow

Septic Tank / Soil Absorption System

Rated Tank Capacity = _____ gallons

Total effective trench bottom area = _____ sq. ft.

Number of Trenches = _____

Total Trench Length = _____ ft.

Design Percolation Rate = _____ min/inch

Depth to seasonal high groundwater = _____ ft.
(if less than 10 feet below ground surface)

Lagoon System

Water Surface Area = _____ sq. ft.

Tested seepage rate = _____ in/day

Other Type System

NDEQ Construction Permit#_____

Certified professional registering the system:

Last Name	First Name	Middle Initial	Professional Certificate #

Signature of Certified Professional	Date of inspection or completion of work

The registration fee must accompany this completed registration form. See Fee Schedule in Appendix A. Include late fee if submitted more than 45 days after completion.
Make checks payable to the **Nebraska Department of Environmental Quality.**
Mail to: NDEQ, Onsite Wastewater Unit, P.O. Box 98922, Lincoln, Nebraska 68509-8922

Title 124

Appendix E

Form D

NDEQ Use Only

CERT # C _ _ _ _

Ver. Aug. 2007

Application for Certification by Examination and Renewal of Certification for Onsite Professionals

(Please type or print)

Last Name	First Name	Middle Initial	_ _ _ - _ _ - _ _ _ _ Social Security Number
Mailing Address ☐ (check to receive official mailings here)	City	State	Zip Code
Business Name			
Business Address Physical Location		City	State
Mailing Address for Business ☐ (check to receive official mailings here)	City	State	Zip Code

Please provide phone numbers in the order of desired contact.

Phone # 1	☐ Home ☐ Office ☐ Cell
Phone # 2	☐ Home ☐ Office ☐ Cell
Phone # 3	☐ Home ☐ Office ☐ Cell

Type of Application:
(Check only one.)

☐ Application for certification by exam.
(Attach Form H, Appendix F)

☐ Renewal of current certificate.
(Current certificate #_____)
(Attach Form K, Appendix H)

The certificate-by-examination fee or the certificate-renewal fee must accompany this application. See Fee Schedule in Appendix A.

NOTE: Pursuant to the Federal Privacy Act of 1974, we are requesting voluntary disclosure of the social security number from applicants for the sole purpose of ensuring legal residency in the State of Nebraska. This number is currently used in the system to assist in proper identification when there are other individuals with the same name. A certification will not be denied solely because an individual declines to disclose his or her social security number. Applications not containing a social security number may take significantly longer to process because other means may be required to ensure proper record identification.

Make your check payable to the **Nebraska Department of Environmental Quality.**
Mail to NDEQ, Onsite Wastewater Unit, P.O. Box 98922, Lincoln, Nebraska 68509-8922

I swear or affirm that the information and documentation submitted are true and accurate.

_____ _____

Signature of Applicant | Type or print name of Applicant

NOTE: If you plan to work for a governmental agency or subdivision as an inspector of onsite wastewater treatment systems you may be eligible for a fee waiver. Contact the Onsite Wastewater Unit for more information.

TITLE 124

Appendix F

NDEQ Use Only

CERT # C _ _ _ _

Form H

Application for Examination for Onsite Professionals

Ver. Aug. 2007

(Please type or print)

Last Name	First Name		Middle Initial
Mailing Address ☐ (check to receive official mailings here)	City	State	Zip Code

Certificate Number (if any)
(If NDEQ has ever issued you any type of onsite wastewater certificate (temporary provisional certificate, hardship certificate, or certificate by examination), enter that certificate number here. Otherwise, leave this line blank.)

Please provide phone numbers in the order of desired contact.

Phone # 1	☐ Home ☐ Office ☐ Cell	**Category(s) of certificate:** (**Check each category for which a certification exam is being requested**. Submit one fee payment or all categories requested.) ☐ Master Installer ☐ Journeyman Installer ☐ Master Pumper ☐ Journeyman Pumper ☐ Soil Evaluator ☐ Inspector
Phone # 2	☐ Home ☐ Office ☐ Cell	
Phone # 3	☐ Home ☐ Office ☐ Cell	

The examination fee for each category requested must accompany this application.

See Fee Schedule in Appendix A.
A separate examination is required for each category of certification you wish to obtain.

Make your check payable to the **Nebraska Department of Environmental Quality.**
Mail to NDEQ, Onsite Wastewater Unit, P.O. Box 98922, Lincoln, Nebraska 68509-8922

Signature of Applicant

Type or print name of Applicant

NOTE: If you plan to work for a governmental agency or subdivision as an inspector of onsite wastewater treatment systems you may be eligible for a fee waiver. Contact the Onsite Wastewater Unit for more information.

Title 124

Appendix G

Ver. Dec. 2006

Form J: Construction Completion Card

(For onsite wastewater systems constructed, reconstructed, altered, or modified under a construction permit.)

OWNER:_____ _____ COUNTY: _____

PROJECT DESCRIPTION:_____

CONSTRUC. PERMIT NO._____ DATE APPROVED:_____

DATE CONSTRUCTION STARTED:_____ DATE ENDED:_____

I certify that construction agreed with approved documents or submitted change orders:

Design Engineer's Signature: _____

PRINT NAME: _____ PE LICENSE #: _____

FIRM & CITY: _____

(stamp)

NDEQ
ONSITE WASTEWATER UNIT
PO BOX 98922
LINCOLN NE 68509-8922

ATTN (reviewer):_____

Title 124

Appendix H

NDEQ Use Only

CERT # C _ _ _ _

Ver. Aug. 2007

Form K

Record of Continuing Education for Onsite Professionals

(Please type or print)

Last Name	First Name		Middle Initial
Mailing Address ☐ (check to receive official mailings here)	**City**	**State**	**Zip Code**

#_____
Certificate Number
(Provide the certificate number from your onsite wastewater professional certificate from NDEQ)

(_____)_____-_____
Phone #

☐ Home
☐ Office
☐ Cell

Date	Course Description	Provider or Sponsor	Location	PDH Hours (nearest 1/10)

Total Professional Development Hours (PDH) =

One Professional Development Hour (PDH) means at least 60 minutes spent in educational activity. Report to the nearest tenth (0.1) hour. Each six (6) minutes in educational activity counts as 0.1 PDH.

If you need more space to report your continuing education programs and courses than is provided on this form, complete and attach additional Forms K as necessary.

Retain documentation of completion of all continuing education hours submitted for a minimum of three (3) years. Documentation shall be submitted to NDEQ on request.

I swear or affirm that the information and documentation submitted are true and accurate.

_____ _____

Signature of Applicant Type or print name of Applicant

Title 124

Appendix I

Nebraska Department of Environmental Quality

Form SD

FOR DEQ USE ONLY
APPROVAL NUMBER:_____
APPROVED BY:_____
DATE APPROVED:_____

Ver. Aug. 2007

Application for Subdivision Review and Approval

(Approval is Required Prior to Any Construction in Development Area)

A. Owner Information (Required):

Owner Name:_____ Owner Address:_____
Street, PO Box, or Route City Zip

B. Certified On-site Professional, Registered Environmental Health Specialist, or Professional Engineer (Required):

Name:_____ Certification Number or Engineer License Number_____

Company Name:_____ Address:_____
Street, PO Box, or Route City Zip

C. Subdivision Location (Required):

Legal Description: _____ _____ _____ _____ _____ Subdivision Name: _____ Lots _____
1/4 of 1/4 Section Twnshp Range

County:_____ _____
Street Address if Applicable

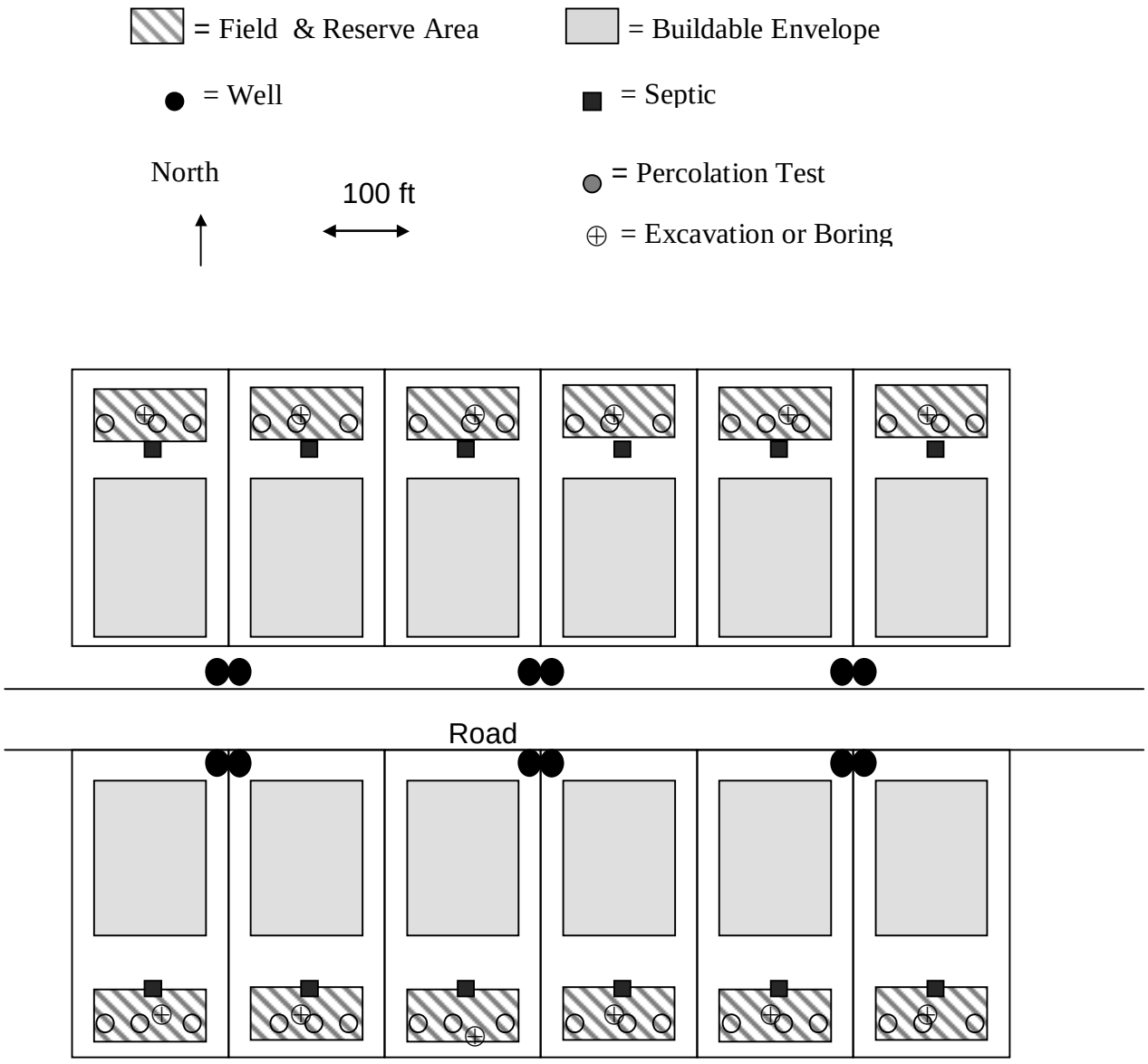
Check Below if Required Information Has Been Submitted – refer to Chapter 4 for minimum requirements.
(Remainder of Form To be completed by Certified On-site Professional, Registered Environmental Heath Specialist, or Professional Engineer)

If Lots are < 1 1/4 Acre	If Lots are > 1 1/4 but < 1 3/4 Acres	If Lots are > 1 3/4 Acres
☐ Percolation Test on Every Lot	☐ Percolation Test on Every Fifth Lot	☐ Percolation Test on Every Fifth Lot
☐ Excavation or Boring to 4 ft. Below Bottom of Proposed Absorption Trench Depth on Every Lot. Include Log of Soils for Each Excavation. Include Depth to Water or Any Barrier Layer Present.	☐ Excavation or Boring to 4 ft. Below Bottom of Proposed Absorption Trench Depth on Every Fifth Lot. Include Log of Soils for Each Excavation. Include Depth to Water or Any Barrier Layer Present.	☐ Excavation or Boring to 4 ft. Below Bottom of Proposed Absorption Trench Depth on Every Fifth Lot. Include Log of Soils for Each Excavation. Include Depth to Water or Any Barrier Layer Present.
☐ Lot Layout indicating All Buildings, Homes, Sidewalks, Driveways, and Outbuildings or Indicate Buildable Envelope (Properly Sized).	☐ Lot Layout indicating All Buildings, Homes, Sidewalks, Driveways, and Outbuildings or Indicate Buildable Envelope (Properly Sized).	
☐ On Lot Layout indicate all Wells and Water Lines Planned and Existing (Indicate if Public Water Supply Well)	☐ On Lot Layout indicate all Wells and Water Lines Planned and Existing (Indicate if Public Water Supply Well)	☐ On Lot Layout indicate all Wells and Water Lines Planned and Existing (Indicate if Public Water Supply Well)
☐ Show Planned Tank Location, Absorption Area and Reserve Area (Properly Sized).	☐ Show Planned Tank Location, Absorption Area and Reserve Area (Properly Sized).	☐ Show Planned Tank Location, Absorption Area and Reserve Area (Properly Sized).

Setbacks	Check if Required Setback Has Been Satisfied											
Distance From	Private Well	Public Well	Surface Water	Ground Water	Pressure Water Lines	Property Lines	Class 1 Foundation		Class 2 Foundation		Class 3 Foundation	
							Yours	Neighbors	Yours	Neighbors	Yours	Neighbors
Tank (ft)	☐ 50	☐ 500	☐ 50	☐ NA	☐ 10	☐ 5	☐ 15	☐ 25	☐ 10	☐ 20	☐ 7	☐ 15
Field (ft)	☐ 100	☐ 500	☐ 50	☐ 4	☐ 25	☐ 5	☐ 30	☐ 40	☐ 20	☐ 30	☐ 10	☐ 20

Appendix I

Form SD
Application for Subdivision Review
Page 2 of 2



NOTE: SAMPLE DIAGRAM. See Chapter 4 for minimum requirements. Other information may be required by the Department as needed to allow adequate review of the proposed development area.

Send or Deliver Completed Application Form SD, Supporting Documents, And Fee To:
Department of Environmental Quality
On-Site Wastewater Unit
1200 N Street, Suite 400
PO Box 98922
Lincoln NE 68509

Title 124

Appendix J

NDEQ Use Only

CERT # C _ _ _ _

Application Form L

Application for Endorsement to Onsite Professional Certificate by Examination

Ver. Dec. 2006

(Please type or print)

_____ **Last Name**	_____ **First Name**		_____ **Middle Initial**
_____ **Mailing Address** ☐ (check to receive official mailings here)	_____ **City**	_____ **State**	_____ **Zip Code**

_____

Certificate Number
(Provide the certificate number from your Certificate by Examination from NDEQ)

Please provide phone numbers in the order of desired contact.

_____ **Phone # 1**	☐ Home ☐ Office ☐ Cell	**Category of endorsement requested:** (Check only one. Separate application and fee required for each category requested.) ☐ Mound Systems
_____ **Phone # 2**	☐ Home ☐ Office ☐ Cell	
_____ **Phone # 3**	☐ Home ☐ Office ☐ Cell	

The examination fee must accompany this application.
See Fee Schedule in Appendix A.
A separate
examination is required for each endorsement you wish to obtain.

Make your check payable to the **Nebraska Department of Environmental Quality.**
Mail to NDEQ, Onsite Wastewater Unit, P.O. Box 98922, Lincoln, Nebraska 68509-8922

_____ Signature of Applicant

_____ Type or print name of Applicant

Title 124
Appendix K

Nebraska Department of Environmental Quality

Form B

FOR NDEQ USE ONLY
PERMIT NUMBER: _____
APPROVED BY: _____
DATE APPROVED: _____

Ver. Aug. 2007

Application for Construction/Operating Permit For An Onsite Wastewater Treatment System

(PLEASE PRINT OR TYPE)

A. Owner Information:

Owner: _____ _____ _____
Name | Street , P.O. Box, or Route | City

Owner: _____ _____ _____ _____/_____
Signature | State | Zip | Phone (Home) | (Work)

B. Engineer Information:

Designer: _____ _____ _____
Name | Firm | Phone (Work)

C. System Location:

Legal Description of Lot: _____ _____ _____ _____ _____ _____ _____ _____
Section | Township | Range | 1/4 | 1/4 | Subdivision | Block | Lot#

County: _____ Have you checked on the need for a Local Permit? ☐ Yes ☐ No

☐ Check here if system mailing address is not the same as the owners and complete mailing information

System mailing Address: _____ _____ _____ _____
Street, P.O. Box, or Route | City | State | Zip

D. This System Will Serve A:

☐ Dwelling

Number of Bedrooms:_____

Is There a Whirlpool Bathtub: ☐ Yes ☐ No

☐ Establishment (Name)_____

Design Flow in Gallons per day: _____

Type of Wastewater: ☐ Domestic ☐ Non-Domestic

E. Septic Tanks:

Number of Tanks in Series:_____ Tank Size (gallons) _____ _____ _____ _____ _____
1st | 2nd | 3rd | 4th | 5th

F. Absorption system:

Percolation Rate: _____ (min. per inch) Soil Type: _____ Land Slope: _____ %

Type of Absorption System: ☐ Trench ☐ Bed ☐ Other _____

Total Square Feet of Field Required: _____ (ft. sq.) Square Feet Proposed: _____ (ft. sq.)

Type of Lateral: ☐ Half-Moon ☐ Perforated Pipe ☐ Gravel ☐ Other Lateral Material: _____

G. Setbacks: Check the Boxes Below If the Required Setback Has Been Satisfied: Ch. 5, Title 124

Distance From	Private Well	Public Well 500	Public Well 1000	Surface Water	Ground Water	Pressure Water lines	Property Lines	Foundations	CLASS I
Tank (ft)	50 ☐	☐	☐	50 ☐	NA ☐	10 ☐	5 ☐	Yours ☐	CLASS II ☐
Field (ft)	100 ☐	☐	☐	50 ☐	4 ☐	25 ☐	5 ☐	Neighbors ☐	CLASS III ☐

COMPLETE SECTIONS **H** & **I**

H.

Complete Adjacent Lot Worksheet for All Wells and Water Lines Within The Reporting Distance in Chapter 5 of Title 124.

NORTHWEST DISTANCE IN FEET **FROM** TANK FIELD WELL: _____ _____ WATER LINES _____ _____	NORTH DISTANCE IN FEET **FROM**: TANK FIELD WELL: _____ _____ WATER LINES: _____ _____	NORTHEAST DISTANCE IN FEET **FROM**: TANK FIELD WELL: _____ _____ WATER LINES: _____ _____
WEST DISTANCE IN FEET **FROM**: TANK FIELD WELL: _____ _____ WATER LINES: _____ _____	PROPOSED SEPTIC SYSTEM INSTALLATION	EAST DISTANCE IN FEET **FROM**: TANK FIELD WELL: _____ _____ WATER LINES: _____ _____
SOUTHWEST DISTANCE IN FEET **FROM**: TANK FIELD WELL: _____ _____ WATER LINES: _____ _____	SOUTH DISTANCE IN FEET **FROM**: TANK FIELD WELL: _____ _____ WATER LINES: _____ _____	SOUTHEAST DISTANCE IN FEET **FROM**: TANK FIELD WELL: _____ _____ WATER LINES: _____ _____

Submit:

* Completed Form B application
* Application Fee (see Fee Schedule)
* Directions to the location with site map
* Dimensioned plot plan and lot survey
* Completed percolation test data
* Log from soil boring or excavation noting soil type and seasonal high water table if present
* Dimensioned drawing showing profile view of septic system and slope of terrain
* For other than septic systems include appropriate system design information
* Show applicant's name, address and phone number on each submitted page

Other information may be required by the Department as needed to allow adequate review of the proposed system.

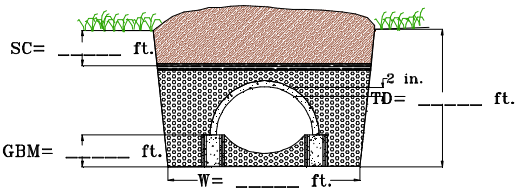
* **Send or Deliver Documents to:**

Department of Environmental Quality
On-site Wastewater Unit
1200 N Street, Suite 400
P.O. Box 98922
Lincoln, Nebraska 68509-8922

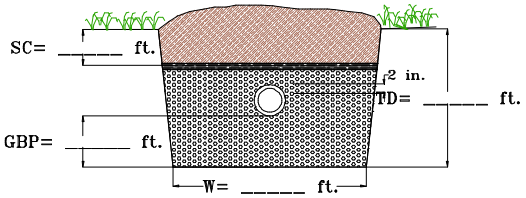
I.

CHECK THE BOX FOR THE APPROPRIATE ABSORPTION FIELD AND COMPLETE THE BLANKS

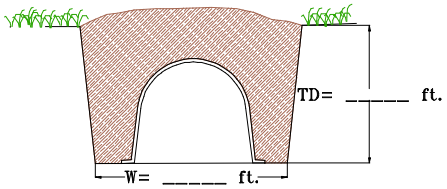
☐ HALF-MOON IN GRAVEL



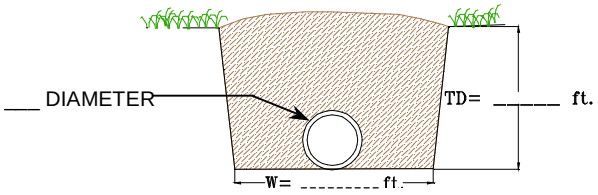
☐ PIPE IN GRAVEL



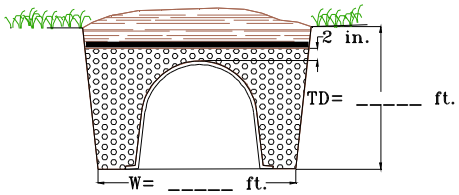
☐ GRAVELLESS CHAMBER IN SOIL



☐ GRAVELLESS PIPE IN SOIL



☐ GRAVELLESS CHAMBER IN GRAVEL



☐ OTHER: Include Drawing

KEY

SC= SOIL COVER, **TD**= TRENCH DEPTH,
W= WIDTH, **GBM**= GRAVEL BELOW HALF MOON,
GBP = GRAVEL BELOW PIPE

Title 124 – Rules and Regulations for the Design, Operation, and Maintenance of On-site Wastewater Treatment Systems is available on the Department's web page at: **www.deq.state.ne.us**